

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)
FOR TRANSFER OF MILITARY FAMILY HOUSING UNITS
TO OPERATION WALKING SHIELD
FROM GRAND FORKS AIR FORCE BASE, NORTH DAKOTA**

The 319 Air Refueling Wing (319 ARW) of the United States Air Force (USAF) has proposed that nineteen housing units be removed from Redwood housing area and two units from Holly housing area and offered for transfer to Operation Walking Shield. The units must be removed to clear the area for future construction of new housing units and construction of a future parking lot for the Youth Center. The Proposed Action, an Alternative Action, and the No Action Alternative were assessed in the attached Environmental Assessment (EA), which is incorporated by reference. Grand Forks AFB is a USAF base within the Air Mobility Command (AMC). The 319 ARW, which serves as the host wing, maintains its mission as the first core refueling wing in the AMC, and guarantees global reach and extended range in the air. The host unit is comprised of a Maintenance Group, Mission Support Group, Medical Group, and Operations Group.

PURPOSE OF AND NEED FOR THE PROPOSED ACTION

The purpose of the Proposed Action is to remove nineteen housing units from Redwood housing area and two units from Holly housing area and offer for transfer to Operation Walking Shield. Operation Walking Shield was created in 1994 with the key objectives to improve the quality of life for our nations' American Indians, with housing, infrastructure development, community development, medical and dental care, and humanitarian aid. The Proposed Action is needed to clear the area for future construction of new housing units and a future parking lot.

DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action involves removing nineteen housing units from Redwood housing area and two units from Holly housing area and offer them for transfer to Operation Walking Shield. The Redwood housing units were built in 1962 and include 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1289, 1290, 1291, 1292, 1293, 1294, 1296, 1297, 1738, 1740, 1742, and 1744 Redwood Drive. The units must be removed to clear the area for future construction of new housing units which will provide modern and efficient housing for military members and their families. The Holly units were built in 1964 and include 1177 and 1179 Maxwell Avenue, and must be removed to clear the area for construction of a future parking lot for the Youth Center. Preparations and transportation will be accomplished by house moving contractors, with funding provided by the Indian reservation(s). Disclosure of Information on Lead Base Paint will be provided to the reservation(s) by Grand Forks AFB.

ALTERNATIVE ACTION

The Alternative Action would involve the demolition of the housing units in order to vacate the lots in preparation for construction of new housing units. A contracting firm will be responsible for demolition and proper disposal of asbestos-containing materials, lead base painted surfaces, other hazardous materials and all demolition debris. This alternative will be used if the recipient should decline the transfer of the housing unit. This alternative would result in greater generation of solid waste, when compared to the Proposed Action. Therefore, it is less desirable than recycling the housing units by transfer to Operation Walking Shield. However, it remains a viable alternative if Operation Walking Shield should decline the offer of housing, due to the costs for renovation and removal of asbestos-containing materials and lead-base paint.

NO ACTION ALTERNATIVE

Report Documentation Page			Form Approved OMB No. 0704-0188		
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE JAN 2005	2. REPORT TYPE		3. DATES COVERED 00-00-2005 to 00-00-2005		
4. TITLE AND SUBTITLE Environmental Assessment Housing Transfer at Grand Forks AFB, North Dakota			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) 319 Civil Engineering Squadron, 319 CES/CEAO, 525 Tuskegee Airmen Blvd, Grand Forks AFB, ND, 58205			8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT This Final EA has been prepared in accordance with the National Environmental Policy Act, and assesses the potential environmental impacts of Housing units transfer, located in Grand Forks County, North Dakota. Resource areas analyzed in the EA include Air Quality; Noise Wastes, Hazardous Materials, and Stored Fuels; Water Resources Biological Resources; Socioeconomic Resources; Cultural Resources Land Use; Transportation Systems; Airspace/Airfield Operations; Safety and Occupational Health; Environmental Management; and Environmental Justice. In addition to the Proposed Action, the Alternative Action and the No Action Alternative were analyzed in the EA. The EA also addresses the potential cumulative effects of the associated activities along with other concurrent actions at Grand Forks AFB and the surrounding area.					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 155	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Under the No Action Alternative, no housing units will be transferred, and units will remain intact. Maintenance costs will continue. Construction of the new military family housing units to replace existing housing units would be jeopardized. Under the No Action Alternative, all of these conditions would continue to hinder Grand Forks AFB from achieving upgrade of the military family housing area with a project to provide a safe, comfortable, and appealing living environment with modern and efficient housing for military members and their families, including units that are handicapped adaptable, recreation space authorized at northern tier bases, underground utilities, parking, landscaping, patios, privacy fencing, community improvement amenities, energy efficient heating, air conditioning, floor coverings, attached garages, and storage.

ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

Analysis of the Proposed Action indicates that the affected environment would not be significantly impacted by proceeding with the proposed transfer of military family housing units to Operation Walking Shield.

Air Quality - Air Quality is considered good and the area is in attainment for all criteria pollutants. No significant impacts to air quality would result because of transfer of military family housing activities.

Noise - The transfer of military family housing would create additional noise. The increase in noise would be negligible and only occur during preparation for transfer.

Wastes, Hazardous Materials, and Stored Fuels - The increase in hazardous and solid wastes from transfer of military family housing would be minimal and temporary. If the demolition alternative is performed, there will be an increase of inert and solid waste. A contracting firm will be responsible for demolition and proper disposal of asbestos-containing materials, lead base painted surfaces, other hazardous materials and all demolition debris. Solid waste debris would be disposed of in an approved location, such as the Grand Forks Municipal Landfill. Inert construction debris would be disposal at an approved location, such as Berger Landfill.

Water Resources – Provided best management practices (BMPs) are followed, there would be minimal impacts on stormwater, ground water and water quality. The proposed action would have no impact on wastewater. There no wetlands in this area. BMP's must be utilized during design and transfer operations to decrease volume, flow rates, and maintain water quality of the sites storm water discharges.

Biological Resources – BMPs and control measures, including silt fences and covering of stockpiles, would be implemented to ensure that impacts to biological resources be kept to a minimum. BMPs would be required to prevent the spread of noxious weeds, minimize soil erosion, and promote the establishment of plant species.

Socioeconomic Resources - This action would have a minor positive effect on the local economy. Secondary retail purchases would make an additional contribution to the local communities. The implementation of the proposed action, therefore, would provide a short-term, beneficial impact to local contractors and retailers during the transportation phase of the project. The proposed action would have a positive effect on the economy of the local American Indian reservation which obtains the housing units.

Cultural Resources - The proposed action has little potential to impact cultural resources. In the unlikely event any such artifacts were discovered during the transfer operations, the operator or

contractor would be instructed to halt operations and immediately notify Grand Forks AFB civil engineers who would notify the State Historic Preservation Officer.

Land Use - The proposed operation would not have an impact on land use, since the area is designated for military family housing.

Transportation Systems - The proposed operation would have minor adverse impact to transportation systems on base due to vehicles traveling to and from housing.

Airspace/Airfield Operations - The proposed action would not impact aircraft safety or airspace compatibility.

Safety and Occupational Health - Any demolition debris must be checked for lead and asbestos, and employees must wear proper personnel protective equipment.

Environmental Management - The proposed action would not impact IRP Sites. BMPs would be implemented to prevent erosion.

Environmental Justice - EO 12898 requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. There is no minority or low-income populations in the area of the proposed action or alternatives, and, thus, there would be no disproportionately high or adverse impact on such populations. The recipients of the family housing units are a minority and low-income population and would benefit from the proposed action.

No adverse environmental impact to any of the areas identified by the AF Form 813 is expected by the proposed action, transfer of military family housing to Operation Walking Shield.

PUBLIC REVIEW AND INTERAGENCY COORDINATION

Based on the provisions set forth in the Proposed Action, all activities were found to comply with the criteria or standards of environmental quality and coordinated with the appropriate Federal, state, and local agencies. The EA and Draft FONSI/FONPA were made available to the public for a 30-day review period. Public agency comments were addressed at the end of the review period prior to implementing the Proposed Action.

FINDINGS

Finding of No Significant Impact. After review of the EA prepared in accordance with the requirements of the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations, and Environmental Impact Analysis Process (EIAP), 32 Code of Federal Regulations 989, as amended, I have determined that the Proposed Action would not have a significant impact on the quality of the human or natural environment and, therefore, an Environmental Impact Statement (EIS) does not need to be prepared.



WAYNE A. KOOP, R.E.M., GM-13
Environmental Management Flight Chief

Date: 27 JAN 05

FINAL

Environmental Assessment

HOUSING TRANSFER

At
Grand Forks AFB, North Dakota

Jan 2005



Cover Sheet

Agency: United States Air Force (USAF)

Action: The action proposes to transfer housing units at Grand Forks Air Force Base (AFB), North Dakota, to a variety of Indian reservations via Operation Walking Shield.

Contacts: 319 CES/CEVA
525 Tuskegee Airmen Boulevard (Blvd)
Grand Forks AFB, ND 58205

Designation: Final Environmental Assessment (EA)

Abstract: This Final EA has been prepared in accordance with the National Environmental Policy Act, and assesses the potential environmental impacts of Housing units transfer, located in Grand Forks County, North Dakota. Resource areas analyzed in the EA include Air Quality; Noise; Wastes, Hazardous Materials, and Stored Fuels; Water Resources; Biological Resources; Socioeconomic Resources; Cultural Resources; Land Use; Transportation Systems; Airspace/Airfield Operations; Safety and Occupational Health; Environmental Management; and Environmental Justice.

In addition to the Proposed Action, the Alternative Action and the No Action Alternative were analyzed in the EA. The EA also addresses the potential cumulative effects of the associated activities along with other concurrent actions at Grand Forks AFB and the surrounding area.

TABLE OF CONTENTS

1.0	PURPOSE OF AND NEED FOR THE PROPOSED ACTION.....	15
1.1	Introduction.....	15
1.2	Need For The Action.....	15
1.3	Objectives For The Action.....	16
1.4	Scope of EA.....	16
1.5	Decision(s) That Must Be Made.....	17
1.6	Applicable Regulatory Requirements And Required Coordination.	17
2.0	DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES.....	21
2.1	Introduction.....	21
2.2	Selection Criteria For Alternatives.....	21
2.3	Alternatives Considered But Eliminated From Detailed Study.....	21
2.4	Description Of Proposed Alternatives.....	21
2.4.1	Alternative 1 (No Action).....	21
2.4.2	Alternative 2 (Proposed Action).....	22
2.4.3	Alternative 3.....	22
2.5	Description of Past, Present, and Reasonably Foreseeable Future Actions Relevant To Cumulative Impacts.....	22
2.6	Summary Comparison Of The Effects Of All Alternatives.....	22
2.7	Identification Of Preferred Alternative.....	23
3.0	AFFECTED ENVIRONMENT.....	25
3.1	Introduction.....	25
3.2	Air Quality.....	25
3.3	Noise.....	27
3.4	Wastes, Hazardous Materials, and Stored Fuels.....	29
3.4.1	Hazardous Waste, Hazardous Material, Recyclable Material	29
3.4.2	Underground and Above Ground Storage Tanks	29
3.4.3	Solid Waste Management	30
3.5	Water Resources.....	30
3.5.1	Ground Water.....	30
3.5.2	Surface Water.....	31
3.5.3	Waste Water.....	32
3.5.4	Water Quality.....	32
3.5.5	Wetlands.....	32
3.6	Biological Resources.....	33
3.6.1	Vegetation.....	33
3.6.2	Wildlife.....	34
3.6.3	Threatened And Endangered Species	34

4.8.2	Alternative 2 (Proposed Action).....	45
4.8.3	Alternative 3.....	45
4.9	Land Use.....	45
4.9.1	Alternative 1 (No Action).....	45
4.9.2	Alternative 2 (Proposed Action).....	45
4.9.3	Alternative 3.....	45
4.10	Transportation Systems.....	45
4.10.1	Alternative 1 (No Action).....	45
4.10.2	Alternative 2 (Proposed Action).....	45
4.10.3	Alternative 3.....	46
4.11	Airspace/Airfield Operations.....	46
4.11.1	Alternative 1 (No Action).....	46
4.11.2	Alternative 2 (Proposed Action).....	46
4.11.3	Alternative 3.....	46
4.12	Safety and Occupation Health.....	46
4.12.1	Alternative 1 (No Action).....	46
4.12.2	Alternative 2 (Proposed Action).....	46
4.12.3	Alternative 3.....	46
4.13	Environmental Management.....	46
4.13.1	Alternative 1 (No Action).....	46
4.13.2	Alternative 2 (Proposed Action)	47
4.13.3	Alternative 3.....	47
4.14	Environmental Justice.....	47
4.14.1	Alternative 1 (No Action).....	47
4.14.2	Alternative 2 (Proposed Action).....	47
4.14.3	Alternative 3.....	47
4.15	Indirect And Cumulative Impacts.....	47
4.16	Unavoidable Adverse Impacts.....	48
4.17	Relationship Between Short-Term Uses and Enhancement of Long-Term Productivity.....	48
4.18	Irreversible And Irretrievable Commitment of Resources.....	48
5.0	LIST OF PREPARERS.....	49
6.0	LIST OF AGENCIES AND PERSONS CONSULTED AND/OR PROVIDED COPIES.....	50
7.0	REFERENCES.....	51

APPENDICES

A	Location Map-Grand Forks AFB
B	Cultural Resource Probability Map
C	Environmental Site Map
D	AF Form 813
E	Location Map-Proposed and Alternative Sites

F	Housing Layout and Real Property Records
G	Lead-base Paint and Asbestos-Containing Material Lab Analysis

List of Tables

2.6-1	Summary of Environmental Impacts.....	23
3.2-1	Climate Data for Grand Forks AFB, ND.....	25
3.2-2	NAAQS and NDAAQS.....	27
3.3-1	Typical Decibel Levels Encountered in the Environment and Industry.....	28
3.3-2	Approximate Sound Levels of Construction Equipment.....	28

ACRONYMS, ABBREVIATIONS, AND TERMS

AAM	Annual Arithmetic Mean
ACM	Asbestos-Containing Material
AFB	Air Force Base
AFI	Air Force Instruction
AICUZ	Air Installation Compatible Use Zone
AMC	Air Mobility Command
APZ	Accident Potential Zone
ARPA	Archeological Resource Protection Act
ARW	Air Refueling Wing
AST	Above Ground Storage Tank
Ave	Avenue
BASH	Bird Aircraft Strike Hazard
Blvd	Boulevard
BMP	Best Management Practice
BMX	Bike Motocross
BOD	Biochemical Oxygen Demand
CAA	Clean Air Act
CWA	Clean Water Act
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CES	Civil Engineering Squadron
CFR	Code of Federal Regulations
CO	Carbon Monoxide
dB	decibel
DBa	Decibel
DNL	Day-Night Average A-Weighted Sound Level
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Endangered Species Act
F	Fahrenheit
FEMA	Federal Emergency Management Agency
FONPA	Finding of No Practicable Alternative
FONSI	Finding of No Significant Impact
ft	Feet
ft ³ /s	feet cubed per meter

GFAFB	Grand Forks Air Force Base
HAP	Hazardous Air Pollutants
hr	Hour
H ₂ S	Hydrogen Sulfide
HVAC	Heating, Ventilating, Air Conditioning
IRP	Installation Restoration Program
LT	Long-Term
MBTA	Migratory Bird Treaty Act
MFH	Military Family Housing
mph	Miles Per Hour
MSDS	Material Safety Data Sheet
MSL	Mean Sea Level
µg/m ³	Micrograms Per Meter Cubed
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
ND	North Dakota
NDAAQS	North Dakota National Ambient Air Quality Standards
NDAC	North Dakota Administrative Code
NDDH	North Dakota Department of Health
NDPDES	North Dakota Pollutant Discharge Elimination System
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFPA	National Fire Protection Act
NHPA	National Historic Preservation Act
NO _x	Nitrogen Oxides
NO ₂	Nitrogen Dioxide
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRHP	National Register of Historic Places
NWR	National Wildlife Refuge
O ₃	Ozone
OSHA	Occupational Safety and Health Act
OWS	Oil Water Separator
P2	Pollution Prevention
Pb	Lead
PCS	Petroleum-Contaminated Soil
PM ₁₀	Particulate Matter 10 Microns in Diameter
PM _{2.5}	Particulate Matter 25 Microns in Diameter
POL	Petroleum Oil Lubricant

ppm	Parts Per Million
PSD	Prevention of Significant Deterioration
QA/QC	Quality Assessment and Quality Control
RACM	Regulated Asbestos-Containing Materials
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
RV	Recreational Vehicle
SAGE	Strategic Air Ground Equipment
SARA	Superfund Amendments and Reauthorization Act
SO ₂	Sulfur Dioxide
SO _x	Sulfur Dioxide
St	Street
ST	Short-Term
SWMU	Solid Waste Management Unit
tpy	Tons Per Year
TSCA	Toxic Substance Control Act
TSI	Thermal System Insulation
US	United States
USACE	United States Army Corps of Engineers
USAF	United States Air Force
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

The United States Air Force (USAF) proposes the transfer of a variety of housing units on Grand Forks Air Force Base (AFB), North Dakota, to a variety of American Indian reservations via Operation Walking Shield.

The Walking Shield American Indian Society created the Operation Walking Shield Program in 1994. The program was designed with the key objectives in mind to improve the quality of life for our nations' American Indians, while at the same time, provide meaningful training opportunities for our nation's military reserve personnel. The Operation Walking Shield Program has grown to include housing, infrastructure development, community development, medical and dental care, and humanitarian aid to our nation's American Indian tribes. Local American Indian reservations include Standing Rock, Fort Berthold, Turtle Mountain, Spirit Lake, Sisseton (Lake Traverse), Pine Ridge, Rosebud, Cheyenne River, Yankton, Lower Brule, Crow Creek, White Earth, Leech Lake, and Red Lake. Information on Walking Shield can be found at [http://www.walkingshield.org/ Operation_WS/Housing_Support.htm](http://www.walkingshield.org/Operation_WS/Housing_Support.htm).

Purpose and Need: The purpose of the proposed action is to transfer excess housing units to the Operation Walking Shield Program. Grand Forks Air Force Base must decide whether, when and where it will transfer housing units on Grand Forks AFB. This transfer does not include the real estate. It includes only the housing unit which will be moved by a house-moving contractor.

No Action Alternative 1: No housing units will be transferred, and units will remain intact. Maintenance costs will continue.

Proposed Action 2: Grand Forks AFB has proposed that nineteen housing units be removed from Redwood housing area and two units from Holly housing area and offered for transfer to Operation Walking Shield. The Redwood housing units were built in 1962 include 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1289, 1290, 1291, 1292, 1293, 1294, 1296, 1297, 1738, 1740, 1742, and 1744 Redwood Drive. It includes 19 buildings, of which there are six single family units and 13 duplexes, to house 32 families total. The units must be removed to clear the area for future construction of new housing units which will provide modern and efficient housing for military members and their families. The Holly units were built in 1964 and include 1177 and 1179 Maxwell Avenue and must be removed to clear the area for construction of a future parking lot for the Youth Center. It includes two duplexes, to house four families. Preparations and transportation will be accomplished by house moving contractors, with funding provided by the Indian reservation(s). Disclosure of Information on Lead Base Paint will be provided to the reservation(s) by Grand Forks AFB.

Alternative Action 3: The housing units will be demolished in order to vacate the lots in preparation for construction of new housing units. A contracting firm will be responsible for demolition and proper disposal of asbestos-containing materials, lead base painted surfaces, other hazardous materials and all demolition debris. The alternative will be used if the recipient should decline the transfer of the housing unit.

Impacts by Resource Area

Air Quality - Air Quality is considered good and the area is in attainment for all criteria pollutants. No significant impacts to air quality would result because of housing transfer activities or housing demolition activities.

Noise - The transfer of housing units would create additional noise. The increase in noise would be negligible and only occur during preparation for transportation or demolition.

Wastes, Hazardous Materials, and Stored Fuels - The increase in hazardous and solid wastes from housing unit transfer would be minimal and temporary, if the transfer alternative is selected. If the housing units are demolished, a large increase in inert industrial debris will be generated. Solid waste debris and asbestos-containing materials would be disposed of in an approved location, such as the Grand Forks Municipal Landfill. Inert construction debris would be disposal at an approved location, such as Berger Landfill. The housing units contain lead base paint in the base coat of the central support floor beam, which have been subsequently covered with non-lead paint. There is potential asbestos-containing materials in the joint compound of the sheetrock wall and ceiling boards, vermiculite blown attic insulation, and floor tiles.

Water Resources – Provided best management practices (BMPs) are followed, there would be minimal impacts on stormwater, ground water, water quality and wastewater. Excavation and other transportation activities may increase the short-term potential of sediment discharges to local surface waters. Grand Forks AFB will obtain a Stormwater Management of Construction Activities permit from the State of North Dakota each year. Contractor(s) and/or AFB employees will need to notify Grand Forks AFB that they will be working under the base permit for Stormwater Management of Construction Activities. Contractor(s) and/or AFB employees must submit a Work Clearance Request, Stormwater Protection Plan, Dust Control Plan, Spill Control Plan, and/or Erosion and Sediment Control Plan to the Environmental Engineering Water Program Manager and the Contracting Officer. The site is not located on a floodplain or wetland

Biological Resources – BMPs and control measures, including silt fences and covering of stockpiles, would be implemented to ensure that impacts to biological resources be kept to a minimum. BMPs would be required to prevent the spread of noxious weeds, minimize soil erosion, and promote the establishment of native plant species.

Socioeconomic Resources - This action would have a minor positive effect on the local economy. Secondary retail purchases would make an additional contribution to the local communities. The implementation of the proposed action, therefore, would provide a short-term, beneficial impact to local contractors and retailers during the transportation or demolition phase of the project.

Cultural Resources - The proposed action has little potential to impact cultural resources. In the unlikely event any such artifacts were discovered during the construction, the operator or

contractor would be instructed to halt operations and immediately notify Grand Forks AFB civil engineers who would notify the State Historic Preservation Officer.

Land Use - The proposed operation would not have an impact on land use, since the area is designated for military family housing.

Transportation Systems – The proposed operation would have minor adverse impact to transportation systems on base due to vehicles traveling to and from housing.

Airspace/Airfield Operations - The proposed action would not impact aircraft safety or airspace compatibility.

Safety and Occupational Health – Contractor(s) would need to comply with all applicable meet OSHA, AFOSH, NFPA, AFI, CFR, EPA, DoT and North Dakota standards.

Environmental Management – The proposed action would not impact IRP Sites. BMPs would be implemented to prevent erosion.

Environmental Justice - EO 12898 requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. There is no minority or low-income populations in the area of the proposed action or alternatives, Grand Forks AFB and, thus, there would be no disproportionately high or adverse impact on such populations. The proposed action to transfer the housing units to Operation Walking Shield would benefit the recipient, a minority and low-income population.

1.0 PURPOSE OF AND NEED FOR PROPOSED ACTION

This Environmental Assessment (EA) examines the potential for impacts to the environment resulting from transfer of housing units on Grand Forks Air Force Base (AFB). As required by the National Environmental Policy Act (NEPA) of 1969, federal agencies must consider environmental consequences in their decision making process. The EA provides analysis of the potential environmental impacts from both the proposed action and its alternatives.

1.1 INTRODUCTION

Located in northeastern North Dakota (ND), Grand Forks AFB is the first core refueling wing in Air Mobility Command (AMC) and home to 48 KC-135R Stratotanker aircraft. The host organization at Grand Forks AFB is the 319th Air Refueling Wing (ARW). Its mission is to guarantee global reach, by extending range in the air, supplying people and cargo where and when they are needed and provides air refueling and airlift capability support to United States Air Force (USAF) operations anywhere in the world, at any time. Organizational structure of the 319th ARW consists primarily of an operations group, maintenance group, mission support group, and medical group.

The location of the proposed action (and the alternative actions) would be at Grand Forks AFB, ND. Grand Forks AFB covers approximately 5,420 acres of government-owned land and is located in northeastern ND, about 14 miles west of Grand Forks, along United States (US) Highway 2. Grand Forks (population 49,321) is the third largest city in ND. Appendix A includes a Location Map. The city, and surrounding area, is a regional center for agriculture, education, and government. It is located approximately 160 miles south of Winnipeg, Manitoba, and 315 miles northwest of Minneapolis, Minnesota. The total base population, as of May 2003, is approximately 6,934. Of that, 2,849 are military, 3,747 are military dependents, and 338 civilians working on base (Grand Forks AFB, 2003). Information on Grand Forks Air Force Base can be found at <http://public.grandforks.amc.af.mil/>. A location map is located in Appendix A.

The Walking Shield American Indian Society created the Operation Walking Shield Program in 1994. The program was designed with the key objectives in mind to improve the quality of life for our nations' American Indians, while at the same time, provide meaningful training opportunities for our nation's military reserve personnel. The Operation Walking Shield Program has grown to include housing, infrastructure development, community development, medical and dental care, and humanitarian aid to our nation's American Indian tribes. Local American Indian reservations include Standing Rock, Fort Berthold, Turtle Mountain, Spirit Lake, Sisseton (Lake Traverse), Pine Ridge, Rosebud, Cheyenne River, Yankton, Lower Brule, Crow Creek, White Earth, Leech Lake, and Red Lake. Information on Operation Walking Shield can be found at http://www.walkingshield.org/Operation_WS/Housing_Support.htm.

1.2 NEED FOR THE ACTION

The purpose of the proposed action is to transfer excess housing units to the Operation Walking Shield Program. Grand Forks Air Force Base must decide whether, when and where it will

transfer housing units on Grand Forks AFB. This transfer does not include the real estate. It includes only the housing unit which will be moved by a house-moving contractor. A copy of the AF 813 is located in Appendix D.

No Action Alternative 1: No housing units will be transferred, and units will remain intact. Maintenance costs will continue.

Proposed Action 2: Grand Forks AFB has proposed that nineteen housing units be removed from Redwood housing area and two units from Holly housing area and offered for transfer to Operation Walking Shield. The Redwood housing units were built in 1962 include 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1289, 1290, 1291, 1292, 1293, 1294, 1296, 1297, 1738, 1740, 1742, and 1744 Redwood Drive. It includes 19 buildings, of which there are six single family units and 13 duplexes, to house 32 families total. The units must be removed to clear the area for future construction of new housing units which will provide modern and efficient housing for military members and their families. The Holly units were built in 1964 and include 1177 and 1179 Maxwell Avenue and must be removed to clear the area for construction of a future parking lot for the Youth Center. It includes two duplexes, to house four families. Preparations and transportation will be accomplished by house moving contractors, with funding provided by the Indian reservation(s). A map of the proposed locations is located in Appendix E. Drawings of the housing layout real property record cards are located in Appendix F.

Alternative Action 3: The housing units will be demolished in order to vacate the lots in preparation for construction of new housing units. A contracting firm will be responsible for demolition and proper disposal of asbestos-containing materials, other hazardous materials and all demolition debris.

1.3 OBJECTIVES FOR THE ACTION

The objective for the action is to provide sufficient vacant space within the housing area to construct new military family housing. The current housing area provides existing utilities which will be used to the greatest extent, where possible, in the new family housing project.

1.4 SCOPE OF EA

This EA identifies, describes, and evaluates the potential environmental impacts associated with transfer of housing units on Grand Forks AFB. This analysis covers only those items listed above. It does not include any previous construction of facilities, parking lots, associated water drainage structures, or other non-related construction activities.

The following must be considered under the NEPA, Section 102(E).

- Air Quality
- Noise
- Wastes, Hazardous Materials, and Stored Fuels
- Water Resources
- Biological Resources

- Socioeconomic Resources
- Cultural Resources
- Land Use
- Transportation Systems
- Airspace/Airfield Operations
- Safety and Occupation Health
- Environmental Management
- Environmental Justice

1.5 DECISION(S) THAT MUST BE MADE

This EA evaluates the environmental consequences from implementing transfer of housing units on Grand Forks AFB. NEPA requires that environmental impacts be considered prior to final decision on a proposed project. The Environmental Management Flight Chief will determine if a Finding of No Significant Impact can be signed or if an Environmental Impact Statement (EIS) must be prepared. Preparation of an environmental analysis must be accomplished prior to a final decision regarding the proposed project and must be available to inform decision makers of potential environmental impacts of selecting the proposed action or any of the alternatives.

1.6 APPLICABLE REGULATORY REQUIREMENTS AND REQUIRED COORDINATION

These regulations require federal agencies to analyze potential environmental impacts of proposed actions and alternatives and to use these analyses in making decisions on a proposed action. All cumulative effects and irretrievable commitment of resources must also be assessed during this process. The Council on Environmental Quality (CEQ) regulations declares that an EA is required to accomplish the following objectives:

- Briefly provide sufficient evidence and analysis for determining whether to prepare an EIS or a Finding of No Significant Impact (FONSI).
- Aid in an agency's compliance with NEPA when an EIS is not necessary, and facilitate preparation of an EIS when necessary.

Air Force Instruction (AFI) 32-7061 as promulgated in 32 Code of Federal Regulations (CFR) 989, specifies the procedural requirements for the implementation of NEPA and the preparation of an EA. Other environmental regulatory requirements relevant to the proposed action and alternatives are also in this EA. Regulatory requirements including, but not restricted to the following programs will be assessed:

- AF Environmental Impact Analysis Process (EIAP) (32 CFR 989)
- AFI 32-7020, Environmental Restoration Program
- AFI 32-7040, Air Quality Compliance
- AFI 32-7041, Water Quality Compliance
- AFI 32-7042, Solid and Hazardous Waste Compliance
- AFI 32-7063, Air Installation Compatible Use Zone (AICUZ) Program
- AFI 32-7064, Integrated Natural Resource Management

- Archaeological Resources Protection Act (ARPA) [16 U.S.C. Sec 470a-11, et seq., as amended]
- Clean Air Act (CAA) [42 U.S.C. Sec 7401, et seq., as amended]
- Clean Water Act (CWA) [33 U.S.C. Sec 400, et seq.]
- CWA [33 U.S.C. Sec 1251, et seq., as amended]
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) [42 U.S.C. Sec. 9601, et seq.]
- Defense Environmental Restoration Program [10 U.S.C. Sec. 2701, et seq.]
- Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 [42 U.S.C. Sec. 11001, et seq.]
- Endangered Species Act (ESA) [16 U.S.C. Sec 1531-1543, et seq.]
- Executive Order (EO) 11514, Protection and Enhancement of Environmental Quality as Amended by EO 11991
- EO 11988, Floodplain Management
- EO 11990, Protection of Wetlands
- EO 12372, Intergovernmental Review of Federal Programs
- EO 12898, Environmental Justice
- EO 12989 Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations
- EO 13045, Protection of Children from Environmental Health Risks and Safety Risks
- Hazardous Materials Transportation Act of 1975 [49 U.S.C. Sec 1761, et seq.]
- NEPA of 1969 [42 U.S.C. Sec 4321, et seq.]
- National Historic Preservation Act (NHPA) of 1966 [16 U.S.C. Sec 470, et seq., as amended]
- The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 [Public Law 101-601, 25 U.S.C. Sec. 3001-3013, et seq.]
- Noise Control Act of 1972 [42 U.S.C. Sec. 4901, et seq., Public Law 92-574]
- ND Air Pollution Control Act (Title 23) and Regulations
- ND Air Quality Standards (Title 33)
- ND Hazardous Air Pollutants Emission Standards (Title 33)
- Occupational Safety and Health Act (OSHA) of 1970 [29 U.S.C. Sec. 651, et seq.]
- Resource Conservation and Recovery Act (RCRA) of 1976 [42 U.S.C. Sec. 6901, et seq.]
- Toxic Substances Control Act (TSCA) of 1976 [15 U.S.C. Sec. 2601, et seq.]

Grand Forks AFB has a National Pollutant Discharge Elimination System (NPDES) permit to cover base-wide industrial activities. Implementation of the proposed action or an alternative action would disturb more than one acre, thus requiring Grand Forks AFB to obtain a separate NPDES from the North Dakota Department of Health (NDDH). The permit would allow discharge of storm water runoff until the site is stabilized by the reestablishment of vegetation or other permanent cover.

Scoping for this EA included discussion of relevant issues with members of the environmental management and bioenvironmental flights. Scoping letters requesting comments on possible issues of concern are sent to agencies with pertinent resource responsibilities. In accordance with AFI 32-7061, a copy is submitted to the ND Division of Community Services.

Applicable regulatory requirements and required coordination with the Environmental Engineering Water Program Manager by the Contractor, or Air Force Base employees, include a Notification of Demolition and Renovation, Work Clearance Request, Stormwater Protection Plan, Dust Control Plan, Spill Control Plan, and/or Erosion and Sediment Control Plan.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

Based on the descriptions of the relevant environmental resources presented in Section 3 and the predictions and analyses presented in Section 4, this section presents a comparative summary matrix of the alternatives (the heart of the analysis), providing the decision maker and the public with a clear basis for choice among the alternatives.

This section has five parts:

- Selection Criteria for Alternatives
- Alternatives Considered but Eliminated from Detailed Study
- Detailed Descriptions of the Four Alternatives Considered
- Comparison of Environmental Effects of the Proposed Action and Alternatives
- Identification of the Preferred Alternative

2.2 SELECTION CRITERIA FOR ALTERNATIVES

Selection criteria used to evaluate the Proposed and Alternative Actions include the following:

A cost effective method to eliminate excess housing units at Grand Forks AFB.

Minimum mission requirements include efficiency, effectiveness, safety, and cost.

Minimum environmental standards include OSHA, AFOSH, NFPA, AFI, CFR, EPA, DoT, and North Dakota standards for noise, air, water, safety, hazardous waste and materials, natural resources, cultural resources, geology, soils, and socioeconomic.

2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

One alternative considered was to relocate the housing units to another location on or off base. This alternative would be a more expensive alternative to the government because the cost of moving these homes would be incurred by the government. Maintenance costs would continue and the Air Force would have housing exhibiting the effects of age and heavy use. There also is no current need for the housing because of current manning and ongoing program to replace all military family housing on Grand Forks AFB.

2.4 DESCRIPTION OF PROPOSED ALTERNATIVES

This section describes the activities that would occur under three alternatives: the no action alternative, the proposed action, and action alternative. These three alternatives provide the decision maker with a reasonable range of alternatives from which to choose. A copy of the AF 813 is located in Appendix D.

2.4.1 Alternative 1 (No Action Alternative): Status Quo

No housing units will be transferred. The housing units would remain empty with no future utilization.

2.4.2 Alternative 2 (Proposed Action): Proposed Action 2: Grand Forks AFB has proposed that nineteen housing units be removed from Redwood housing area and two units from Holly housing area and offered for transfer to Operation Walking Shield. The Redwood housing units were built in 1962 include 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1289, 1290, 1291, 1292, 1293, 1294, 1296, 1297, 1738, 1740, 1742, and 1744 Redwood Drive. It includes 19 buildings, of which there are six single family units and 13 duplexes, to house 32 families total. The units must be removed to clear the area for future construction of new housing units which will provide modern and efficient housing for military members and their families. The Holly units were built in 1964 and include 1177 and 1179 Maxwell Avenue and must be removed to clear the area for construction of a future parking lot for the Youth Center. It includes two duplexes, to house four families. Preparations and transportation will be accomplished by house moving contractors, with funding provided by the Indian reservation(s). A map of the proposed locations is located in Appendix E. Drawings of the housing layout and real property record cards are located in Appendix F.

2.4.3 Alternative 3: The housing units will be demolished in order to vacate the lots in preparation for construction of new housing units. A contracting firm will be responsible for demolition and proper disposal of asbestos-containing materials, other hazardous materials and all demolition debris.

2.5 DESCRIPTION OF PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS RELEVANT TO CUMULATIVE IMPACTS

Impacts from the Proposed Action would be concurrent with other actions occurring at Grand Forks AFB. There are several other construction and demolition projects occurring on Grand Forks AFB in the same time frame. These projects are addressed under separate NEPA documents. Several projects to transfer or demolish obsolete housing have been accomplished in the past, contributing to an improved, military base environment. Related EIAP documents are RCS # 1999-145 EA on Transfer of Dakota Housing Sheds; 1999-072 EA on Transfer of Dakota MFH; 2002-060 EA on Demolition of Penn Circle Housing; and 2002-092 EA on Replacement of MFH with Transfer to Contractor for choice of Demolition.

2.6 SUMMARY COMPARISON OF THE EFFECTS OF ALL ALTERNATIVES

Potential impacts from implementing the No Action Alternative, the Proposed Action, and Alternative are discussed in detail in Chapter 4.

Table 2.6.1: Summary of Environmental Impacts

	No Action Alternative 1	Proposed Action 2	Alternative 3	
Legend: ST = short-term; LT = long-term				
Air Quality	None	Minor Adverse ST Impact	Minor Adverse ST Impact	
Noise	None	Minor Adverse ST Impact	Minor Adverse ST Impact	
Wastes, Hazardous Materials, and Stored Fuels	None	Minor Adverse ST Impact	Minor Adverse ST Impact	
Water Resources				
Ground Water	None	Minor Adverse ST Impact	Minor Adverse ST Impact	
Surface Water	None	Minor Adverse ST Impact	Minor Adverse ST Impact	
Wastewater	None	None	None	
Water Quality	None	None	None	
Wetlands	None	None	None	
Biological Resources				
Vegetation	None	Minor Adverse ST Impact	Minor Adverse ST Impact	
Noxious Weeds	None	Minor Adverse ST Impact	Minor Adverse ST Impact	
Wildlife	None	Minor Adverse ST Impact	Minor Adverse ST Impact	
Threatened and Endangered Species	None	Minor Adverse ST Impact	Minor Adverse ST Impact	
Socioeconomic Resources	None	Beneficial ST Impact	Beneficial ST Impact	
Cultural Resources	None	None	None	
Land Use	None	None	None	
Transportation Systems	None	Minor Adverse ST Impact	Minor Adverse ST Impact	
Airspace/Airfield Operations				
Aircraft Safety	None	None	None	
Airspace Compatibility	None	None	None	
Safety and Occupational Health	None	None	None	
Environmental Management				
Installation Restoration Program	None	None	None	
Geological Resources	None	None	None	
Pesticide Management	None	None	None	
Environmental Justice	None	None	None	

2.6 IDENTIFICATION OF PREFERRED ALTERNATIVE

Grand Forks AFB will allow transfer of housing units from Grand Forks AFB to a variety of American Indian reservations via Operation Walking Shield. Preparation and transportation will be accomplished by house-moving contractor(s), with funds provided by the Indian reservations.

3.0 AFFECTED ENVIRONMENT

3.1 INTRODUCTION

This section succinctly describes the operational concerns and the environmental resources relevant to the decision that must be made concerning this proposed action. Environmental concerns and issues relevant to the decision to be made and the attributes of the potentially affected environment are studied in greater detail in this section. This descriptive section, combined with the definitions of the alternatives in Section 2, and their predicted effects in Section 4, establish the scientific baseline against which the decision-maker and the public can compare and evaluate the activities and effects of all the alternatives. An environmental site location map is located in Appendix C.

3.2 AIR QUALITY

Grand Forks AFB has a humid continental climate that is characterized by frequent and drastic weather changes. The summers are short and humid with frequent thunderstorms. Winters are long and severe with almost continuous snow cover. The spring and fall seasons are generally short transition periods. The average annual temperature is 40°F and the monthly mean temperature varies from 6°F in January to 70°F in July. Mean annual precipitation is 19.5 inches. Rainfall is generally well distributed throughout the year, with summer being the wettest season and winter the driest. An average of 34 thunderstorm days per year is recorded, with some of these storms being severe and accompanied by hail and tornadoes. Mean annual snowfall recorded is 40 inches with the mean monthly snowfall ranging from 1.6 inches in October to 8.0 inches in March. Relative humidity averages 58 percent annually, with highest humidity being recorded in the early morning. The average humidity at dawn is 76 percent. Mean cloud cover is 48 percent in the summer and 56 percent in the winter (USAF, 2003).

Table 3.2-1: Climate Data for Grand Forks AFB, ND						
	Mean Temperature (°F)			Precipitation (Inches)		
	Daily			Monthly		
Month	Maximum	Minimum	Monthly	Mean	Maximum	Minimum
January	15	-1	6	0.7	2.4	0.1
February	21	5	13	0.5	3.2	0.0
March	34	18	26	1.0	2.9	0.0
April	53	32	41	1.5	4.0	0.0
May	69	47	56	2.5	7.8	0.5
June	77	56	66	3.0	8.1	0.8
July	81	61	70	2.7	8.1	0.5
August	80	59	67	2.6	5.5	0.1
September	70	49	57	2.3	6.2	0.3
October	56	37	44	1.4	5.7	0.1
November	34	20	26	0.7	3.3	0.0
December	20	6	12	0.6	1.4	0.0
Source: AFCCC/DOO, October 1998						

Wind speed averages 10 miles per hour (mph). A maximum wind speed of 74 mph has been recorded. Wind direction is generally from the northwest during the late fall, winter, and spring, and from the southeast during the summer.

Grand Forks County is included in the ND Air Quality Control Region. This region is in attainment status for all criteria pollutants. In 1997, the ND Department of Health (NDDH) conducted an Air Quality Monitoring Survey that indicated that the quality of ambient air in ND is generally good as it is located in an attainment area (NDDH, 1998). Grand Forks AFB has the following air permits: T5-F78004 (permit to operate) issued by NDDH and a CAA Title V air emissions permit.

The United States Environmental Protection Agency (USEPA) established the National Ambient Air Quality Standards (NAAQS), which define the maximum allowable concentrations of pollutants that may be reached, but not exceeded within a given time period. The NAAQS regulates the following criteria pollutants: Ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), and particulate matter. The ND Ambient Air Quality Standards (NDAAQS) were set by the State of ND. These standards are more stringent and emissions for operations in ND must comply with the Federal or State standard that is the most restrictive. There is also a standard for hydrogen sulfide (H₂S) in ND.

Prevention of significant deterioration (PSD) regulations establishes SO₂, particulate matter 10 microns in diameter (PM₁₀), and NO₂ that can be emitted above a premeasured amount in each of three class areas. Grand Forks AFB is located in a PSD Class II area where moderate, well-controlled industrial growth could be permitted. Class I areas are pristine areas and include national parks and wilderness areas. Significant increases in emissions from stationary sources (100 tons per year (tpy) of CO, 40 tpy of nitrogen oxides (NO_x), volatile organic compounds (VOCs), or sulfur oxides (SO_x), or 15 tpy of PM₁₀) and the addition of major sources requires compliance with PSD regulations. There is also a 25 ton/year level for total particulate.

Air pollutants include O₃, CO, NO₂, SO₂, Pb, and particulate matter. Ground disturbing activities create PM₁₀ and particulate matter 2.5 microns in diameter (PM_{2.5}). Combustion creates CO, SO₂, PM₁₀, and PM_{2.5} particulate matter and the precursors (VOC and NO₂) to O₃. Only small amounts of Hazardous Air Pollutants (HAP) are generated from internal combustion processes or earth-moving activities. The Grand Forks AFB Final Emissions Survey Report (USAF, 1996) reported that Grand Forks AFB only generated small levels HAPs, 10.3 tpy of combined HAPs and 2.2 tpy maximum of a single HAP (methyl ethyl ketone). Methyl Ethyl Ketone is associated with aircraft and vehicle maintenance and repair. Secondary sources include fuel storage and dispensing (USAF, 2001a).

Table 3.2-2
National Ambient Air Quality Standards (NAAQS) and ND Ambient Air Quality Standards (NDAAQS)

Pollutant	Averaging Time	NAAQS $\mu\text{g}/\text{m}^3$ (ppm) ^a		NDAAQS $\mu\text{g}/\text{m}^3$ (ppm) ^a
		Primary ^b	Secondary ^c	
O ₃	1 hr 8 hr ^e	235 (0.12) 157 (0.08)	Same Same	Same None
CO	1 hr 8 hr	40,000 (35) 10,000 (9)	None None	40,000 (35) 10,000 (9)
NO ₂	AAM ^d	100 (0.053)	Same	Same
SO ₂	1 hr 3 hr 24 hr AAM	None None 365 (0.14) 80 (0.03)	None 1,300 (0.5) None None	715 (0.273) None 260 (0.099) 60 (0.023)
PM ₁₀	AAM 24 hr	50 150	Same Same	Same Same
PM _{2.5} ^e	AAM 24 hr	65 15	Same Same	None None
Pb	¼ year	1.5	Same	Same
H ₂ S	1 hr 24 hr 3 mth AAM Instantaneous	None None None None	None None None None	280 (0.20) 140 (0.10) 28 (0.02) 14 (10) 14 (10)

^a $\mu\text{g}/\text{m}^3$ – micrograms per cubic meter; ppm – parts per million

^bNational Primary Standards establish the level of air quality necessary to protect the public health from any known or anticipated adverse effects of pollutant, allowing a margin of safety to protect sensitive members of the population.

^cNational Secondary Standards establish the level of air quality necessary to protect the public welfare by preventing injury to agricultural crops and livestock, deterioration of materials and property, and adverse impacts on the environment.

^dAAM – Annual Arithmetic Mean.

^eThe Ozone 8-hour standard and the PM 2.5 standards are included for information only. A 1999 federal court ruling blocked implementation of these standards, which USEPA proposed in 1997. USEPA has asked the US Supreme Court to reconsider that decision (USEPA, 2000).

PM₁₀ is particulate matter equal to or less than 10 microns in diameter.

PM_{2.5} is particulate matter equal to or less than 2.5 microns in diameter.

Source: 40 CFR 50, ND Air Pollution Control Regulations – North Dakota Administrative Code (NDAC) 33-15

3.3 NOISE

Noise generated on Grand Forks AFB consists mostly of aircraft, vehicular traffic and construction activity. Most noise is generated from aircraft during takeoff and landing and not from ground traffic. Noise levels are dependent upon type of aircraft, type of operations, and distance from the observer to the aircraft. Duration of the noise is dependent upon proximity of the aircraft, speed, and orientation with respect to the observer.

Table 3.3-1 Typical Decibel Levels Encountered in the Environment and Industry			
Sound Level (dBa) ^a	Maximum Exposure Limits	Source of Noise	Subjective Impression
10			Threshold of hearing
20		Still recording studio; Rustling leaves	
30		Quiet bedroom	
35		Soft whisper at 5 ft ^b ; Typical library	
40		Quiet urban setting (nighttime); Normal level in home	Threshold of quiet
45		Large transformer at 200 ft	
50		Private business office; Light traffic at 100 ft; Quiet urban setting (daytime)	
55		Window air conditioner; Men's clothing department in store	Desirable limit for outdoor residential area use (EPA)
60		Conversation speech; Data processing center	
65		Busy restaurant; Automobile at 100 ft	Acceptable level for residential land use
70		Vacuum cleaner in home; Freight train at 100 ft	Threshold of moderately loud
75		Freeway at 10 ft	
80		Ringling alarm clock at 2 ft; Kitchen garbage disposal; Loud orchestral music in large room	Most residents annoyed
85		Printing press; Boiler room; Heavy truck at 50 ft	Threshold of hearing damage for prolonged exposure
90	8 hr ^c	Heavy city traffic	
95	4 hr	Freight train at 50 ft; Home lawn mower	
100	2 hr	Pile driver at 50 ft; Heavy diesel equipment at 25 ft	Threshold of very loud
105	1 hr	Banging on steel plate; Air Hammer	
110	0.5 hr	Rock music concert; Turbine condenser	
115	0.25 hr	Jet plane overhead at 500 ft	
120	< 0.25 hr	Jet plane taking off at 200 ft	Threshold of pain
135	< 0.25 hr	Civil defense siren at 100 ft	Threshold of extremely loud
^a dBA – decibals ^b ft – feet ^c hr - hours Source: US Army, 1978			

Table 3.3-2 Approximate Sound Levels (dBa) of Construction Equipment						
Equipment Type	Sound Levels (dBa) at Various Distances (ft)					
	50	100	200	400	800	1,600
Front-end Loader	84	78	72	66	60	54
Dump Truck	83	77	71	65	59	53
Truck	83	77	71	65	59	53
Tractor	84	78	72	66	58	52
Source: Thurman, 1976; US Army, 1978						

Because military installations attract development in proximity to their airfields, the potential exists for urban encroachment and incompatible development. The USAF utilizes a program known as AICUZ to help alleviate noise and accident potential problems due to unsuitable community development. AICUZ recommendations give surrounding communities alternatives to help prevent urban encroachment. Noise contours are developed from the Day-Night Average A-Weighted Sound Level (DNL) data which defines the noise created by flight operations and ground-based activities. The AICUZ also defines Accident Potential Zones (APZs), which are rectangular corridors extending from the ends of the runways. Recommended land use activities and densities in the APZs for residential, commercial, and industrial uses are provided in the base's AICUZ study. Grand Forks AFB takes measures to minimize noise levels by evaluating aircraft operations. Blast deflectors are utilized in designated areas to deflect blast and minimize exposure to noise.

3.4 WASTES, HAZARDOUS MATERIALS, AND STORED FUELS

3.4.1 Hazardous Waste, Hazardous Material, Recyclable Material

Hazardous wastes, as listed under the RCRA, are defined as any solid, liquid, contained gaseous, or combination of wastes that pose a substantive or potential hazard to human health or the environment. On-base hazardous waste generation involves three types of on-base sites: an accumulation point (90-day), satellite accumulation points, and spill cleanup equipment and materials storage (USAF, 2001c). Discharge and emergency response equipment is maintained in accessible areas throughout Grand Forks AFB. The Fire Department maintains adequate fire response and discharge control and containment equipment. Equipment stores are maintained in buildings 523 and 530. Petroleum contaminated soils generated from excavations throughout the base can be treated at the land treatment facility located on base. These solid wastes are tilled or turned several times a year to remediate the soils to acceptable levels.

Recyclable materials from industrial facilities are collected in the recycling facility, in building 671. Paper, cardboard, and wood are collected in separate storage bins. Glass, plastics and metal cans are commingled. Curbside containers are used in housing for recyclable materials. A contractor collects these materials and transports them off base for processing.

The Environmental Management Flight manages the hazardous material through a contract with Chenega Management, LLC. Typical hazardous materials include reactive materials such as explosives, ignitables, toxics, and corrosives. Improper storage can impact human health and the safety of the environment.

3.4.2 Underground and Above Ground Storage Tanks

Since Grand Forks AFB is a military installation with a flying mission, there are several aboveground and underground fuel storage tanks (ASTs and USTs).

Gasoline, diesel fuel, heating fuel, JP-8, and oil-water separator (OWS)-recovered oils are stored in thirty-nine (39) USTs. Twenty (20) regulated USTs include three (3) gasoline tanks, eight (8) diesel tanks, three (3) JP-8 tanks, and six (6) OWS product recovery tanks. Deferred USTs

include fourteen (14) JP-8 tanks of which nine (9) are no longer in use and are programmed for removal. Five (5) USTs exempt from regulation include one (1) heating oil tank, four (4) emergency spill containment tanks, and one (1) hydraulic oil recovery tank.

Gasoline, diesel fuel, heating oil, JP-8, and used oil are stored in fifty-eight (58) ASTs. The majority of petroleum is JP-8 stored in six (6) tanks with a capacity of 3,990,000 gallons for the hydrant fuel system. Diesel fuel is stored in forty-five (45) tanks primarily for emergency generators. Other tanks include: heating oil stored in two (2) tanks; gasoline stored in two (2) tanks; and, used oil stored in three (3) tanks. All ASTs either have secondary containment or are programmed to have secondary containment installed. The six (6) hydrant fuel system tanks each are contained by a concrete dike system.

Runway deicing fluid (potassium acetate) is stored in two (2) 5000 gallon tanks while aircraft deicing fluid (propylene glycol) is stored in a 20,000 gallon tank (Type I) and a 4,000 gallon tank (Type IV).

3.4.3 Solid Waste Management

Hard fill, construction debris, and inert waste generated by Grand Forks AFB are disposed of at a permitted off-base landfill. All on-base household garbage and solid waste is collected by a contractor and transported to the Grand Forks County Landfill, which opened in 1982.

The majority of demolition debris is disposed of at Berger Landfill (permit number IT-198) while municipal waste and asbestos waste is disposed of at the Grand Forks Landfill (SW-069).

GFAFB also operates a land treatment facility (IT-183) for the remediation of petroleum-contaminated soils (PCSs). PCSs are generated on-base through spills, are encountered while excavating for various subsurface repairs, or encountered while replacing or removing underground storage tanks and piping.

3.5 WATER RESOURCES

3.5.1 Ground Water

Chemical quality of ground water is dependent upon the amount and type of dissolved gases, minerals, and organic material leached by water from surrounding rocks as it flows from recharge to discharge areas. The water table depth varies throughout the base, from a typical 1-3 ft to 10 ft or more below the surface.

Even though the Dakota Aquifer has produced more water than any other aquifer in Grand Forks County, the water is very saline and generally unsatisfactory for domestic and most industrial uses. Its primary use is for livestock watering. It is sodium chloride type water with total dissolved solids concentrations of about 4,400 ppm. The water generally contains excessive chloride, iron, sulfate, total dissolved solids, and fluoride. The water from the Dakota is highly toxic to most domestic plants and small grain crops, and in places, the water is too highly mineralized for use as livestock water (Hansen and Kume, 1970).

Water from wells tapping the Emerado Aquifer near Grand Forks AFB is generally of poor quality due to upward leakage of poor quality water from underlying bedrock aquifers. It is sodium sulfate type water with excessive hardness, chloride, sulfate, and total dissolved solids. Water from the Lake Agassiz beach aquifers is usually of good chemical quality in Grand Forks County. The water is a calcium bicarbonate type that is relatively soft. The total dissolved content ranges from 308 to 1,490 ppm. Most water from beach aquifers is satisfactory for industrial, livestock, and agricultural uses (Hansen and Kume, 1970).

Grand Forks AFB draws 85 to 90 percent of its water for industrial, commercial and housing functions from the City of Grand Forks and 10 to 15 percent from Agassiz Water.

3.5.2 Surface Water

Natural surface water features located on or near Grand Forks AFB are the Turtle River and Kellys Slough National Wildlife Refuge (NWR). Drainage from surface water channels ultimately flows into the Red River.

The Turtle River, crossing the base boundary at the northwest corner, is very sinuous and generally flows in a northeasterly direction. It receives surface water runoff from the western portion of Grand Forks AFB and eventually empties into the Red River of the North that flows north to Lake Winnipeg, Canada. The Red River drainage basin is part of the Hudson Bay drainage system. At Manvel, ND, approximately 10 miles northeast of Grand Forks AFB, the mean discharge of the Turtle River is 50.3 feet cubed per second (ft³/s). Peak flows result from spring runoff in April and minimum flows (or no flow in some years) occur in January and February.

NDDH has designated the Turtle River to be a Class II stream, it may be intermittent, but, when flowing, the quality of the water, after treatment, meets the chemical, physical, and bacteriological requirements of the NDDH for municipal use. The designation also states that it is of sufficient quality to permit use for irrigation, for propagation of life for resident fish species, and for boating, swimming, and other water recreation.

Kelly's Slough NWR occupies a wide, marshy flood plain with a poorly defined stream channel, approximately two miles east and downstream of Grand Forks AFB. Kellys Slough NWR receives surface water runoff from the east half of the base and effluent from the base sewage lagoons located east of the base. Surface water flow of the slough is northeasterly into the Turtle River Drainage from surface water channels ultimately flowing into the Red River. Floodplains are limited to an area 250 ft on either side of Turtle River (about 46 acres on base). Appendix C contains a map depicting floodplains. Any development in or modifications to floodplains must be coordinated with the Corps of Engineers and the Federal Emergency Management Agency (FEMA). The North Dakota State Water Commission requires that any structure in the floodplain have its lowest floor above the identified 100-year flood level.

Surface water runoff leaves Grand Forks AFB at four primary locations related to identifiable drainage areas on base. The four sites are identified as northeast, northwest, west, and southeast related to the base proper. These outfalls were approved by the NDDH as stated in the Grand

Forks AFB ND Pollutant Discharge Elimination System (NDPDES) Permit NDR02-0314 Stormwater Discharges from Industrial Activity. Of the four outfall locations, the west and northwest sites flow into the Turtle River, the northeast site flows to the north ditch and the southeast outfall flows into the south ditch. The latter two flow to Kellys Slough and then the Turtle River. All drainage from these surface water channels ultimately flows into the Red River. The Bioenvironmental Engineering Office samples the four outfall locations during months when de-icing activities occur on base.

3.5.3 Waste Water

Grand Forks AFB discharges its domestic and industrial wastewater to four stabilization lagoons located east of the main base. The four separate treatment cells consist of one primary treatment cell, two secondary treatment cells, and one tertiary treatment cell. Wastewater effluent is discharged under ND Permit ND0020621 into Kellys Slough. Wastewater discharge occurs for about one week, sometime between mid-April through October. Industrial wastewater at the base comprises less than ten percent of the total flow to the treatment lagoons.

3.5.4 Water Quality

According to the National Water Quality Inventory Report (USEPA, 1995), ND reports the majority of rivers and streams have good water quality. Natural conditions, such as low flows, can contribute to violations of water quality standards. During low flow periods, the rivers are generally too saline for domestic use. Grand Forks AFB receives water from Grand Forks and Lake Agassiz Water. The city recovers its water from the Red River and the Red Lake River, while the water association provides water from aquifers. The water association recovers water from well systems within glacial drift aquifers (USAF, 1999). The 319th Civil Engineering Squadron tests the water received on base daily for fluorine and chlorine. The 319th Bioenvironmental Flight collects monthly bacteriological samples to be analyzed at the ND State Laboratory.

3.5.5 Wetlands

About 246,900 acres in the county are drained wetland Type I (wet meadow) to Type V (open freshwater). Approximately 59,500 acres of wetland Type I to V are used for wetland habitat. Wetland Types IV and V include areas of inland saline marshes and open saline water. Kellys Slough NWR occupies a wide, marshy flood plain with a poorly defined stream channel, approximately two miles east and downstream of Grand Forks AFB. Kellys Slough NWR is the most important regional wetland area in the Grand Forks vicinity. EO 11990 requires zero loss of wetlands. Earlier surveys indicated Grand Forks AFB had 49 wetlands, covering 23.9 acres of wetlands, including 33 jurisdictional wetlands covering 12.2 acres. A wetland delineation conducted in 2004 indicated that the base had increased to 198 wetlands, including 164 Palustrine Emergent, 31 Palustrine Scrub-Shrub, and 3 Palustrine Forested type wetlands. Vegetation is robust at GFAFB wetlands, and they are characterized as typical prairie potholes found within the northern plains ecoregion.

Wetlands on Grand Forks AFB occur frequently in drainage ways, low-lying depressions, and potholes. Wetlands are highly concentrated in drainage ways leading from the wastewater treatment lagoons to Kellys Slough NWR. The majority of wetland areas occur in the northern and central portions of base, near the runway, while the remaining areas are near the eastern boundary and southeastern corner of base. Development in or near these areas must include coordination with the ND State Water Commission and the USACE. To help preserve wetlands, the North Dakota, Grand Forks County regional office of the Natural Resource Conservation Service recommends a 100-ft vegetated (grass) buffer with a perimeter filter strip.

3.6 BIOLOGICAL RESOURCES

3.6.1 Vegetation

Plants include a large variety of naturally occurring native plants. Hay land, wildlife management areas, waterfowl production areas, neighboring wildlife refuges, state parks, and conservation reserve program land have created excellent grassland and wetland habitats for wildlife in Grand Forks County. Pastures, meadows, and other non-cultivated areas create a prairie-land mosaic of grasses, legumes, and wild herbaceous plants. Included in the grasses and legumes vegetation species are tall wheat grass, brome grass, Kentucky bluegrass, sweet clover, and alfalfa. Herbaceous plants include little bluestem, goldenrod, green needle grass, western wheat grass, and bluegrama. Shrubs such as Juneberry, dogwood, hawthorn, buffaloberry, and snowberry also are found in the area. In wetland areas, predominant species include *Typha* sp., smartweed, wild millet, cord grass, bulrushes, sedges, and reeds. These habitats for upland wildlife and wetland wildlife attract a variety of species to the area and support many aquatic species.

Various researchers, most associated with the University of ND, have studied current native floras in the vicinity of the base. The Natural Heritage Inventory through field investigations has identified ten natural communities occurring in Grand Forks County (1994). Of these, two communities are found within base boundaries, River/Creek and Lowland Woodland. The River/Creek natural community refers to the Turtle River. This area is characterized by submergent and emergent aquatic plants, green algae, diatoms, diverse invertebrate animals such as sponges, flatworms, nematode worms, segmented worms, snails, clams, and immature and adult insects, fish, amphibians, turtles, and aquatic birds and mammals. Dominant trees in the Lowland Community include elm, cottonwood, and green ash. Dutch elm disease has killed many of the elms. European buckthorn (a highly invasive exotic species), chokecherry, and wood rose (*Rosa woodsii*) are common in the under story in this area. Wood nettle (*Laportea canadensis*), stinging nettle (*Urtica dioica*), beggars' ticks (*Bidens frondosa*), and waterleaf (*Hydrophyllum virginianum*) are typical forbes.

A prairie restoration project in the "Prairie View Nature Preserve" has been developed to restore a part of the native tallgrass prairie that once was dominant in this region. Plants thriving in this preserve include western wheatgrass, slender wheatgrass, big bluestem, little bluestem, Indian grass, switchgrass, blue gramma, buffalo grass, and many native wildflower species.

Two hundred and fifty five taxa were identified in the ND Natural Heritage Inventory and the BS Bioserve biological inventory update for Grand Forks Air Force Base. Two rare orchid species are known to exist on Grand Forks AFB, the Large and Small Yellow Lady's Slipper, identified during the 2004 inventory.

3.6.2 Wildlife

Grand Forks County is agrarian in nature, however it does have many wildlife management areas, waterfowl production areas, conservation reserve program land, and recreational areas providing excellent habitat for local wildlife within the county. Kellys Slough NWR is located a couple miles northeast of Grand Forks AFB. In addition to being a wetland, it is a stopover point for thousands of migratory birds, especially shorebirds. The Prairie Chicken Wildlife Management Area is located north of Mekinock and contains 1,160 acres of habitat for deer, sharp-tailed grouse, and game birds. Wildlife can also be found at the Turtle River State Park, The Bremer Nature Trail, and the Myra Arboretum.

The base supports a remarkable diversity of wildlife given its size and location within an agricultural matrix. The Turtle River riparian corridor, Prairie View Nature Preserve, grassland areas on the west side of the base, and the lagoons to the east of the base all provide important habitat for native plant and wildlife species and should be conserved as such within mission constraints. Many mammalian species are found on base such as the white tail deer, eastern cottontail, coyotes, beaver, raccoons, striped skunks, badgers, voles, gophers, shrews, mice, muskrat, squirrels, bats, and occasional moose and bear.

One hundred seventy bird species were identified in the 2004 biological survey, many of which include grassland bird species. Grassland bird populations are declining across North America due to huge losses of prime grassland habitat from conversion to agricultural, urban, and industrial development. No other avian group has experienced such dramatic losses as grassland birds. GFAFB is fortunate to support a large variety of grassland birds, many of which are listed on the Partners-in-Flight species of concern list, such as the grasshopper sparrow. Large blocks of grassland should be conserved to protect these grassland bird species if the mission constraints allow it.

3.6.3 Threatened and Endangered Species

According to the Biological Survey Update 2004 of GFAFB, 21 state-listed birds and 1 federally listed bird species, 2 state-listed plant species, 1 state-listed mammal species, and 1 state-listed amphibian have been identified at GFAFB. The base does have infrequent use by migratory threatened and endangered species, such as the bald eagle, but there are no critical or significant habitats for those species present. Several rare and state-listed species have been observed on base near Turtle River, the lagoons, and the grassland to the west of the airfield. The ESA does require that Federal Agencies not jeopardize the existence of a threatened or endangered species nor destroy or adversely modify designated critical habitat for threatened or endangered species.

3.7 SOCIOECONOMIC RESOURCES

Grand Forks County is primarily an agricultural region and, as part of the Red River Valley, is one of the worlds most fertile. Cash crops include sugar beets, beans, corn, barley, and oats. The valley ranks first in the nation in the production of potatoes, spring wheat, sunflowers, and durum wheat. Grand Forks County's population in 2000 was 66,109, a decrease of 6.5 percent from the 1990 population of 70,638 (ND State Data Center, No Date). Grand Forks County's annual mean wage in Oct 2001 was \$26,715 (Job Service of ND, 2001). Grand Forks AFB is one of the largest employers in Grand Forks County. As of May 2003, Grand Forks AFB had 3,165 active duty military members and 338 civilian employees. The total annual economic impact for Grand Forks AFB is \$325,647,980.

3.8 CULTURAL RESOURCES

According to the Grand Forks AFB Cultural Resources Management Plan, there are no archeological sites that are potentially eligible for the National Register of Historic Places (NRHP). A total of six archeological sites and six archeological find spots have been identified on the base. None meet the criteria of eligibility of the NRHP established in 36 CFR 60.4. There is no evidence for Native American burial grounds, or other culturally sensitive areas. Paleosols (soil that developed on a past landscape) remain a management concern requiring Section 106 compliance. Reconnaissance-level archival and archeological surveys of Grand Forks AFB conducted by the University of ND in 1989 indicated that there are no facilities (50 years or older) that possess historical significance. The base is currently consulting with the ND Historical Society on the future use of eight Cold War Era facilities. These are buildings 313, 606, 703, 704, 705, 706, 707, and 714. A cultural resource location map is located in Appendix B. Actual or potential historic properties could be impacted by placement of the units at new locations. When locations are selected for each unit, consultation should be initiated with the appropriate SHPO and any interested federal agency(ies) (such as the Bureau of Indian Affairs) for review of the proposed APE.

3.9 LAND USE

Land use in Grand Forks County consists primarily of cultivated crops with remaining land used for pasture and hay, urban development, recreation, and wildlife habitat. Principal crops are spring wheat, barley, sunflowers, potatoes, and sugar beets. Turtle River State Park, developed as a recreation area in Grand Forks County, is located about five miles west of the base. Several watershed protection dams are being developed for recreation activities including picnicking, swimming, and ball fields. Wildlife habitat is very limited in the county. Kellys Slough NWR (located about two miles east of the base) and the adjacent National Waterfowl Production Area are managed for wetland wildlife and migratory waterfowl, but they also include a significant acreage of open land wildlife habitat.

The main base encompasses 5,420 acres, of which the USAF owns 4,830 acres and another 590 acres are lands containing easements, permits, and licenses. Improved grounds, consisting of all covered area (under buildings and sidewalks), land surrounding base buildings, the 9-hole golf course, recreational ball fields, and the family housing area, encompass 1,120 acres. Semi-improved grounds, including the airfield, fence lines and ditch banks, skeet range, and riding

stables account for 1,390 acres. The remaining 2,910 acres of the installation consist of unimproved grounds. These areas are comprised of woodlands, open space, and wetlands, including four lagoons (180.4 acres) used for the treatment of base wastewater. Agricultural out leased land (1,040 acres) is also classified as unimproved. Land use at the base is solely urban in nature, with residential development to the south and cropland, hayfields, and pastures to the north, west, and east of the base.

3.10 TRANSPORTATION SYSTEMS

Seven thousand vehicles per day travel ND County Road B3 from Grand Forks AFB's east gate to the US Highway 2 Interchange (Clayton, 2001). Two thousand vehicles per day use the off-ramp from US Highway 2 onto ND County Road B3 (Dunn, 2001). US Highway 2, east of the base interchange, handles 10,800 vehicles per day. (Kingsley and Kuntz, 2001). A four lane arterial road has a capacity of 6,000 vehicles per hour and a two lane, 3,000, based on the average capacity of 1,500 vehicles per hour per lane. Roadways adjacent to Grand Forks AFB are quite capable of accommodating existing traffic flows (USAF, 2001a).

Grand Forks AFB has good traffic flow even during peak hours (6-8 am and 4-6 pm). There are two gates: the main gate located off of County Road B3, about one mile north of U.S. Highway 2 and the Secondary Gate located off of U.S. Highway 2, about 3/4 mile west of County Road B3. The main gate is connected to Steen Boulevard (Blvd), which is the main east-west road, and serves the passenger traffic; and the south gate is connected to Eielson Street (St), which is the main north-south road and serves the truck traffic.

3.11 AIRSPACE/AIRFIELD OPERATIONS

3.11.1 AIRCRAFT SAFETY

Bird Aircraft Strike Hazard (BASH) is a major safety concern for military aircraft. Collision with birds may result in aircraft damage and aircrew injury, which may result in high repair costs or loss of the aircraft. A BASH hazard exists at Grand Forks AFB and its vicinity, due to resident and migratory birds. Daily and seasonal bird movements create various hazardous conditions. Although BASH problems are minimal, Kellys Slough NWR is a major stopover for migratory birds. Canadian Geese and other large waterfowl have been seen in the area (USAF, 2001b).

3.11.2 AIRSPACE COMPATIBILITY

The primary objective of airspace management is to ensure the best possible use of available airspace to meet user needs and to segregate requirements that are incompatible with existing airspace or land uses. The Federal Aviation Administration has overall responsibility for managing the nation's airspace and constantly reviews civil and military airspace needs to ensure all interests are compatibly served to the greatest extent possible. Airspace is regulated and managed through use of flight rules, designated aeronautical maps, and air traffic control procedures and separation criteria.

3.12 SAFETY AND OCCUPATIONAL HEALTH

Safety and occupational health issues include one-time and long-term exposure. Examples include asbestos/radiation/chemical exposure, explosives safety quantity-distance, and bird/wildlife aircraft hazard. Safety issues include injuries or deaths resulting from a one-time accident. Aircraft Safety includes information on birds/wildlife aircraft hazards and the BASH program. Health issues include long-term exposure to chemicals such as asbestos and lead-based paint. Safety and occupational health concerns could impact personnel working on the project and in the surrounding area.

The National Emission Standards for Hazardous Air Pollutants (NESHAP) of the CAA designates asbestos as HAP. OSHA provides worker protection for employees who work around or asbestos-containing material (ACM). Regulated ACM (RACM) includes thermal system insulation (TSI), any surfacing material, and any friable asbestos-containing material. Non-regulated Category I non-friable ACM includes floor tile and joint compound.

Lead exposure can result from paint chips or dust or inhalation of lead vapors from torch-cutting operations. This exposure can affect the human nervous system. Due to the size of children, exposure to lead based paint is especially dangerous to small children. OSHA considers all painted surfaces in which lead is detectable to have a potential for occupational health exposure. Lab Analysis results for lead-base paint and asbestos-containing material is contained in Appendix G.

3.13 ENVIRONMENTAL MANAGEMENT

3.13.1 INSTALLATION RESTORATION PROGRAM

The Installation Restoration Program (IRP) is the AF's environmental restoration program based on the CERCLA. CERCLA provides for Federal agencies with the authority to inventory, investigate, and clean up uncontrolled or abandoned hazardous waste sites. There are seven IRP sites at Grand Forks AFB. These sites are identified as potentially impacted by past hazardous material or hazardous waste activities. They are the Fire Training Area/Old Sanitary Landfill Area, FT-02; New Sanitary Landfill Area, LF-03; Strategic Air Ground Equipment (SAGE) Building 306, ST-04; Explosive Ordnance Detonation Area, OT-05; Refueling Ramps and Pads, Base Tanks Area, ST-06; POL Off-Loading Area, ST-07; and Refueling Ramps and Pads, ST-08 (USAF, 1997b). Two sites are considered closed, OT-05 and ST-06. ST-08 has had a remedial investigation/feasibility study (RI/FS) completed and the rest are in long-term monitoring. Grand Forks AFB is not on the National Priorities List (NPL)

3.13.2 GEOLOGICAL RESOURCES

3.13.2.1 Physiography and Topography

The topography of Grand Forks County ranges from broad, flat plains to gently rolling hills that were produced mainly by glacial activity. Local relief rarely exceeds 100 ft in one mile, and, in parts of the lake basin, less than five ft in one mile.

Grand Forks AFB is located within the Central Lowlands physiographic province. The topography of Grand Forks County, and the entire Red River Valley, is largely a result of the former existence of Glacial Lake Agassiz, which existed in this area during the melting of the last glacier, about 12,000 years ago (Stoner et al., 1993). The eastern four-fifths of Grand Forks County, including the base, lies in the Agassiz Lake Plain District, which extends westward to the Pembina escarpment in the western portion of the county. The escarpment separates the Agassiz Lake Plain District from the Drift Plain District to the west. Glacial Lake Agassiz occupied the valley in a series of recessive lake stages, most of which were sufficient duration to produce shoreline features inland from the edge of the lake. Prominent physiographic features of the Agassiz Lake Plain District are remnant lake plains, beaches, inter-beach areas, and delta plains. Strandline deposits, associated with fluctuating lake levels, are also present and are indicated by narrow ridges of sand and gravel that typically trend northwest-southwest in Grand Forks County.

Grand Forks AFB lies on a large lake plain in the eastern portion of Grand Forks County. The lake plain is characterized by somewhat poorly drained flats and swells, separated by poorly drained shallow swells and sloughs (Doolittle et al., 1981). The plain is generally level, with local relief being less than one foot. Land at the base is relatively flat; with elevations ranging from 880 to 920 ft mean sea level (MSL) and averaging about 890 ft MSL. The land slopes to the north at less than 12 ft per mile.

3.13.2.2 Soil Type Condition

Soils consist of the Gilby loam series that are characterized by deep, somewhat poorly drained, moderately to slowly permeable soils in areas between beach ridges. The loam can be found from 0 to 12 inches. From 12 to 26 inches, the soil is a mixture of loam, silt loam, and very fine sandy loam. From 26 to 60 inches, the soil is loam and clay loam.

3.13.3 PESTICIDE MANAGEMENT

Pesticides are handled at various facilities including Environmental Controls, Golf Course Maintenance, and Grounds Maintenance. Other organizations assist in the management of pesticides and monitoring or personnel working with pesticides. Primary uses are for weed and mosquito control. Herbicides, such as picloram, nonselective glyphosate and 2,4-D are used to maintain areas on base. Military Public Health and Bioenvironmental Engineering provide information on the safe handling, storage, and use of pesticides. Military Public Health maintains records on all pesticide applicators. The Fire Department provides emergency response in the event of a spill, fire, or similar type incident.

3.14 ENVIRONMENTAL JUSTICE

Environmental justice addresses the minority and low-income characteristics of the area, in this case Grand Forks County. The county is more than 93 percent Caucasian, 2.3 percent Native American, 1.4 percent African-American, 1 percent Asian/Pacific Islander, less than 1 percent Other, and 1.6 percent “Two or more races”. In comparison, the US is 75.2 percent Caucasian, 12.3 African-American, 0.9 percent Native American or Native Alaskan, 3.6 percent Asian, 0.1 Native Hawaiian or Pacific Islander, 5.5 percent Other, and 2.4 percent “Two or more races”. Approximately 12.5 percent of the county’s population is below the poverty level in comparison to 13.3 percent of the state (US Bureau of the Census, 2002). There are few residences and no concentrations of low-income or minority populations around Grand Forks AFB.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

The effects of the proposed action and the alternatives on the affected environment are discussed in this section. The project involves transfer of housing units on Grand Forks AFB.

4.2 AIR QUALITY

4.2.1 Alternative 1 (No Action)

The no action alternative would not impact air quality.

4.2.2 Alternatives 2 (Proposed Action)

No long-term effects; however short term effects involve heavy construction and moving equipment emissions (not a concern as they are mobile sources) and fugitive dust (mentioned on our Title V permit). Air Quality is considered good and the area is in attainment for all criteria pollutants. Fugitive emissions from construction activities are expected to be below the regulatory threshold and would be managed in accordance with NDAC 33-15-17-03. Best management practices (BMPs) to reduce fugitive emissions would be implemented to reduce the amount of these emissions.

4.2.3 Alternative 3

Impacts would be similar to those generated under the proposed action.

4.3 NOISE

4.3.1 Alternative 1 (No Action)

The no action alternative would not impact noise generation.

4.3.2 Alternative 2 (Proposed Action)

The short-term operation of heavy equipment in the housing area would generate additional noise. These noise impacts would exist only during operations and would cease after completion. The increase in noise from activities would be negligible.

4.3.3 Alternative 3

Impacts would be similar to those generated under the proposed action.

4.4 WASTES, HAZARDOUS MATERIALS, AND STORED FUELS

4.4.1 Alternative 1 (No Action)

The no action alternative would not impact hazardous or solid waste generation.

4.4.2 Alternative 2 (Proposed Action)

The increase in hazardous and solid wastes from transfer of housing units would be minimal and temporary, if the houses are transferred intact. There is a floor beam supporting each unit which has been painted with a lead-base paint primer, and repainted with layers of non-lead-base paint in a variety of colors, makes and ingredients. If the paint on the floor beam should start flaking and the problem is not corrected by repainting, the potential for poisoning by lead base paint chips could exist. There is also the existence of asbestos-containing materials (ACM) in some of the housing units. ACM is typically found in the joint compound of the wall and ceiling sheetrock, in the vinyl composite floor tiles, and the vermiculite attic insulation. As long as the ACM remains intact and non-flaking, it is considered non-friable and safe. When the sheetrock, floor tiles and insulation become worn and show signs of becoming friable, the recipient must have the ACM removed by a State-licensed and certified asbestos removal specialist and disposed in an ACM-approved landfill. Lab Analysis results for lead-base paint and asbestos-containing material is contained in Appendix G.

4.4.3 Alternative 3

Impacts would be similar to those generated under the proposed action. If the houses are demolished, a large increase of inert construction debris will be generated. Efforts to recycle would include those items which are profitable for salvage, such as the furnace, water heater, appliances, concrete foundations, metal steel, copper, brass, cupboards, and some windows. The ACM and solid waste debris must be disposed in a landfill approved for asbestos-containing materials, such as the Grand Forks Landfill, which is located within 12 miles of the proposed site. All solid waste materials would be managed and transported in accordance with the state's solid and hazardous waste rules. Appropriate efforts to reduce, reuse and/or recycle waste materials are encouraged by the State of North Dakota. Inert waste would be segregated from non-inert waste, where possible, to reduce the cost of waste management. Inert waste includes such materials as wood, plastic, glass, and sheetrock. Hard fill, construction debris, and inert wastes generated by Grand Forks AFB are disposed of at a permitted off-base landfill. The majority of demolition debris would be disposed at Berger Landfill (permit number IT-198), while municipal waste and asbestos-containing material would be disposed at the Grand Forks Landfill (SW-069). Lab Analysis results for lead-base paint and asbestos-containing material is contained in Appendix G.

4.5 WATER RESOURCES

4.5.1 Alternative 1 (No Action Alternative)

The no action alternative would have no impact on groundwater, surface water, wastewater, water quality, or wetlands.

4.5.2 Alternative 2 (Proposed Action)

Groundwater: Provided best management practices are followed, there will be minimal impacts on ground water.

Surface Water: Surface water quality could be degraded in the short-term during actual demolition/removal in the immediate area. The short-term effects come from possible erosion contributing to turbidity of runoff and possible contamination from spills or leaks from construction equipment. The contractor must utilize effective methods to control surface water runoff and minimize erosion. Proper stabilization and seeding the site immediately upon completion of the construction would provide beneficial vegetation, controlling erosion. Provided best management practices are utilized during design and construction, negative surface water impacts should be minimal.

Water Quality: Provided containment needs are met and best management practices are used, the proposed action would have minimal impact to water quality.

Wastewater: The proposed action would have no impact on wastewater.

Wetlands: The proposed action would have no direct impact on wetlands provided BMP's are utilized during design and construction.

4.5.3 Alternative 3 (Alternative Action)

This alternative would have the same impacts as the proposed action, with the exception of introducing more debris to the local landfills.

4.6 BIOLOGICAL RESOURCES

4.6.1 Alternative 1 (No Action)

The no action alternative would not impact wildlife, vegetation, or other biological resources.

4.6.2 Alternative 2 (Proposed Action)

Vegetation: The site location is in an improved area consisting of quality vegetation providing erosion, runoff, and sedimentation control, and habitat for many species. The proposed action will potentially remove all vegetation by the use of manpower and heavy equipment throughout the specific housing footprint. BMPs and control measures, including silt fences and covering of stockpiles, must be implemented to ensure that impacts to biological resources be kept to a minimum outside of the construction footprint. Disturbed areas of the housing footprint must be re-established with grass seeding.

Noxious Weeds: Public law 93-629 mandates control of noxious weeds. Limit possible weed seed transport from infested areas to non-infested sites. Avoid activities in or adjacent to heavily infested areas or remove seed sources and propagules from site prior to conducting activities, or

limit operations to non-seed producing seasons. Wash or otherwise remove all vegetation and soil from equipment before transporting to a new site. Following activities which expose the soil mitigate by covering the area with weed seed free mulch and/or seed the area with native species. Covering the soil will reduce the germination of weed seeds, maintain soil moisture, and minimize erosion. If any fill material is used, it should be from a weed-free source.

Wildlife: Preparations for transportation or demolition would have negative impacts to wildlife. The area is improved, providing limited habitat for small mammals, birds, and invertebrates, such as mice, rabbits, grassland birds, butterflies, and raptors. Due to the abundance and mobility of these species and the available adjacent habitat, any wildlife disturbed would be able to find similar habitat in the local area. Cumulative affects of habitat loss, may result in species competition on the remaining habitats causing strain/stress on available resources, and result in removal of some species from the local landscape.

Threatened or Endangered Species: According to the Biological Survey Update 2004 of GFAFB, 21 state-listed birds and 1 federally listed bird species, 2 state-listed plant species, 1 state-listed mammal species, and 1 state-listed amphibian have been identified at GFAFB. The federally listed bird species (the Bald Eagle) has no critical habitat at GFAFB. Proposed activities should have minimal impact on these sensitive species. Some sensitive species of grassland birds may utilize this habitat, but have not been recorded in this area. Cumulative affects of developing on semi-improved and unimproved lands will contribute to habitat loss for grassland birds. Habitat loss is the number one factor identified causing dramatic declines of this avian assemblage in North America, and is especially prevalent in the great and northern plains of this continent. No known threatened or endangered plant species have been identified in the proposed section.

4.6.3 Alternative 3

Impacts would be similar to those generated under the proposed action.

4.7 SOCIOECONOMIC RESOURCES

4.7.1 Alternative 1 (No Action)

The no action alternative would not impact socioeconomics.

4.7.2 Alternative 2 (Proposed Action)

Secondary retail purchases would make an additional contribution to the local communities. The implementation of the proposed action, therefore, would provide a short-term, minimal beneficial impact to local retailers during the transportation or demolition phase of the project.

4.7.3 Alternative 3

Impacts would be similar to those generated under the proposed action.

4.8 CULTURAL RESOURCES

4.8.1 Alternative 1 (No Action)

The no action alternative would not impact cultural resources.

4.8.2 Alternative 2 (Proposed Action)

The proposed action has little potential to impact cultural resources. In the unlikely event any such artifacts were discovered during the construction activities, the operator would be instructed to halt construction and immediately notify Grand Forks AFB civil engineers who would notify the State Historic Preservation Officer. Actual or potential historic properties could be impacted by placement of the units at new locations. When locations are selected for each unit, consultation should be initiated with the appropriate SHPO and any interested federal agency(ies) (such as the Bureau of Indian Affairs) for review of the proposed APE.

4.8.3 Alternative 3

Alternative impacts would be similar to those generated under the proposed action.

4.9 LAND USE

4.9.1 Alternative 1 (No Action)

The no action alternative would not have an impact on land use.

4.9.2 Alternative 2 (Proposed Action)

The proposed operation would not have an impact on this land use currently designated for military housing.

4.9.3 Alternative 3

Alternative impacts would be similar to those generated under the proposed action.

4.10 TRANSPORTATION SYSTEMS

4.10.1 Alternative 1 (No Action)

The action would not impact transportation.

4.10.2 Alternative 2 (Proposed Action)

The proposed action would have minimal adverse impact to transportation systems on base due to vehicles traveling to and from housing during preparation for transportation or demolition.

4.10.3 Alternative 3

Impacts would be similar to those generated under the proposed action.

4.11 AIRSPACE/AIRFIELD OPERATIONS

4.11.1 Alternative 1 (No Action)

The no action alternative would not impact aircraft safety or airspace compatibility.

4.11.2 Alternative 2 (Proposed Action)

The proposed action would not impact aircraft safety or airspace compatibility.

4.11.3 Alternative 3

Impacts would be similar to those generated under the proposed action.

4.12 SAFETY AND OCCUPATIONAL HEALTH

4.12.1 Alternative 1 (No Action)

The no action alternative would not impact safety and occupational health.

4.12.2 Alternative 2 (Proposed Action)

The contractor(s) involved in the transportation or demolition of housing units would have to comply with all applicable safety and occupational health rules and regulations required by DoD, OSHA, AFOSH, NFPA, AFI, CFR, EPA, DoT, and North Dakota standards.

4.12.3 Alternative 3

Impacts would be similar to those generated under the proposed action.

4.13 ENVIRONMENTAL MANAGEMENT

4.13.1 Alternative 1 (No Action)

The no action alternative would not impact IRP Sites or geological resources.

4.13.2 Alternative 2 (Proposed Action)

IRP: The proposed action would not impact IRP Sites.

Geology: The proposed action would not impact geological resources. Soils present in the proposed area include the Gilby series.

Pesticides: None would be used during the transfer of housing units.

4.13.3 Alternative 3

Impacts would be similar to those generated under the proposed action.

4.14 ENVIRONMENTAL JUSTICE

4.14.1 Alternative 1 (No Action)

The no action alternative would not impact environmental justice.

4.14.2 Alternative 2 (Proposed Action)

EO 12898 requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. There are no minority or low-income populations in the area of the proposed action or alternatives on Grand Forks AFB, and, thus, there would be no disproportionately high or adverse impact on such populations. The recipient of the housing units, the American Indian, is a minority and low-income, and therefore would benefit from the proposed transfer of housing.

4.14.3 Alternative 3

Impacts would be similar to those generated under the proposed action.

4.15 INDIRECT AND CUMULATIVE IMPACTS

The short-term increases in air emissions and noise during preparation for transportation or demolition and the impacts predicted for other resource areas, would not be significant when considered cumulatively with other ongoing and planned activities at Grand Forks AFB and nearby off-base areas. The cumulative impact of the Proposed Action or Alternative with other ongoing activities in the area would produce an increase in solid waste generation; however, the increase would be limited to the timeframe of each project. The area landfills used for construction and demolition debris do not have capacity concerns and could readily handle the solid waste generated by the various projects. Actual or potential historic properties could be

impacted by placement of the units at new locations. When locations are selected for each unit, consultation should be initiated with the appropriate SHPO and any interested federal agency(ies) (such as the Bureau of Indian Affairs) for review of the proposed APE.

4.16 UNAVIODABLE ADVERSE IMPACTS

The proposed action and alternatives would involve the use of transportation or demolition vehicles, and their short-term impacts on noise, air quality, and traffic are unavoidable.

4.17 RELATIONSHIP BETWEEN SHORT-TERM USES AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The proposed action and alternatives would involve the use of previously developed areas. No croplands, pastureland, wooded areas, or wetlands would be modified or affected as a result of implementing the Proposed Action and, consequently, productivity of the area would not be degraded.

4.18 IRREVERSIVLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Under the proposed action, fuels, manpower, economic resources, and other recovery materials related to the housing unit transfer would be irreversibly lost.

5.0 LIST OF PREPARERS

Steve Braun
USTs and Special Programs
319 CES/CEVC
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Everett “Gene” Crouse
Chief, Airfield Management
319 OSS OSAA
695 Steen Blvd
Grand Forks AFB ND 58205

Diane Strom
NEPA/EIAP Program
319 CES/CEVA
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Mark Hanson
Contract Attorney
319 ARW/JA
460 Steen Blvd
Grand Forks AFB ND 58205

Gary Johnson
Ground Safety Manager
319 ARW/SEG
679 4th Avenue (Ave)
Grand Forks AFB ND 58205

Chris Klaus
Water Programs Manager
319 CES/CEVC
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Heidi Nelson
Community Planner
319 CES/CECP
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Larry Olderbak
Environmental Restoration Manager
319 CES/CEVR
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Gary Raknerud
Chief, Pollution Prevention
319 CES/CEVP
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Kristen Rundquist
Natural Resources/Air Program Manager
319 CES/CEVC
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Bradley J. Schulte, Capt, USAF, BSC
Bioenvironmental Engineering Flight
Commander
319AMDS/SGGB
1599 J St
Grand Forks AFB ND 58205

6.0 LIST OF AGENCIES AND PERSONS CONSULTED AND/OR PROVIDED COPIES

Dr. Terry Dwelle
State Health Officer
North Dakota Department of Health
600 East Boulevard Ave
Bismarck, ND 58505-0200

Mr. Dean Hildebrand
Commissioner
North Dakota Game and Fish
100 North Bismarck Expressway
Bismarck, ND 58501

Mr. Merlan E. Paaverud
State Historic Preservation Officer
State Historical Society of North Dakota
612 East Boulevard Ave
Bismarck ND 58505-0200

Jeffrey K. Towner, Field Supervisor
U. S. Fish and Wildlife Service
North Dakota Field Office
3425 Miriam Avenue
Bismarck, North Dakota 58501-7926

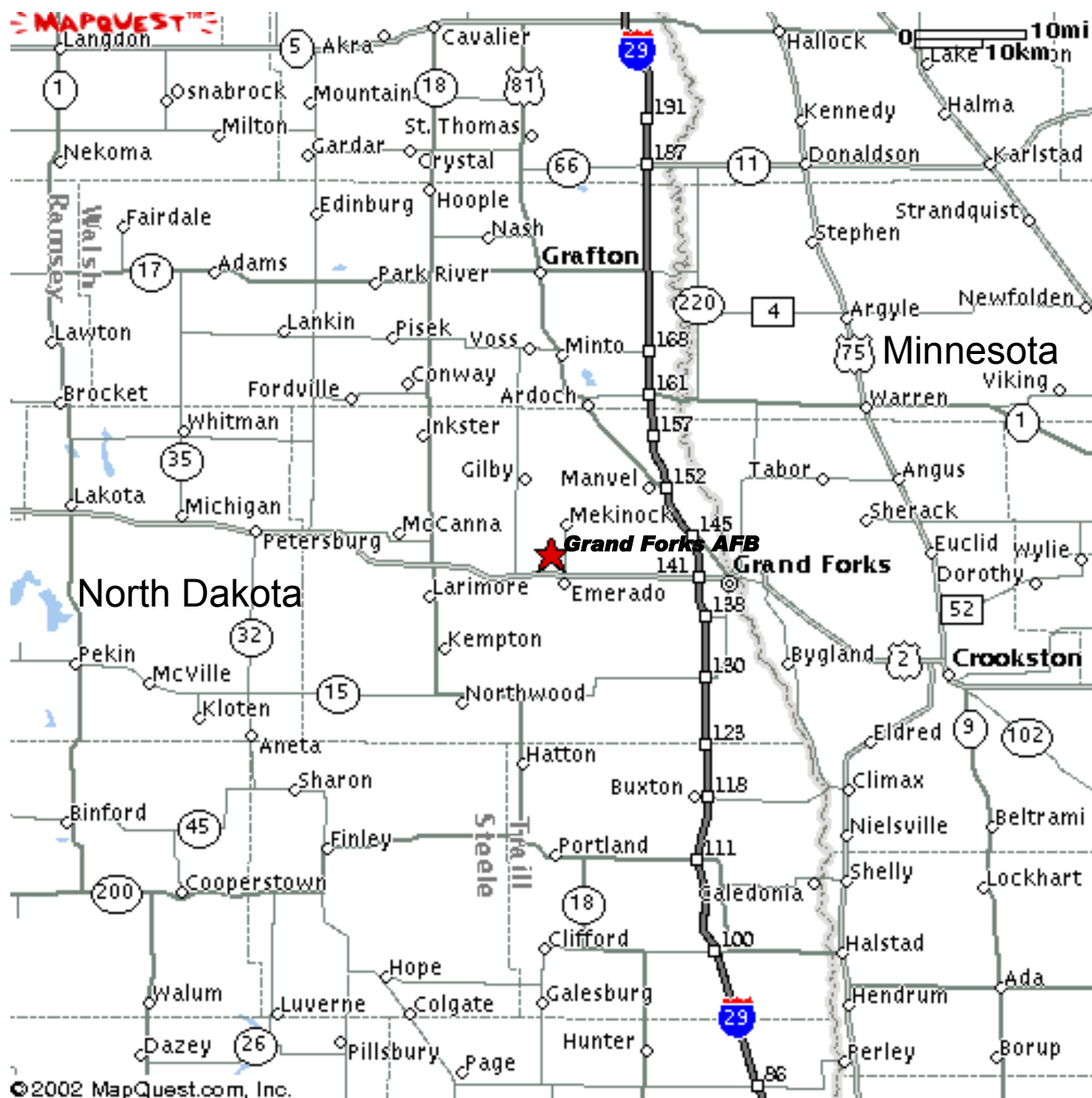
7.0 REFERENCES

- Clayton, Scott, 2001. Personal communication. Grand Forks County Engineer.
- Doolittle, J. A., C. A. Heidt, S. J. Larson, T. P. Ryterske, M. G. Ulmer, and P. E. Wellman, Undated. Soil Survey of Grand Forks County, ND, U.S. Department of Agriculture, Soil Conservation Service.
- Dunn, Curtis, 2001. Personal communication. ND Department of Transportation, Grand Forks District Office.
- Grand Forks AFB, 2001. Economic Impact Analysis Fiscal Year 2001. Home Page.
- Hansen, Dan E. and Jack Kume, 1970. Genealogy and Ground Water Resources of Grand Forks County, Part I, Geology; ND Geological Survey Bulletin No. 53.
- Job Service of ND, 2001. ND State Wage Survey. Home Page.
- Kingsley, Dirk, 2001. Personal communication. ND Department of Transportation. April.
- Kuntz, Sean, 2001. Personal communication. ND Department of Transportation. April.
- NDDH, 2001. Division of Air Quality, Asbestos Control Program. www.health.state.nd.us
- NDDH, 1998. Annual Report, ND Air Quality Monitoring Data Summary. July.
- ND Natural Heritage Inventory and ND Parks and Recreation Department. Grand Forks AFB, ND, Biological Survey. 1994.
- ND State Data Center, No Date. Census ND 2000. Home Page.
- Stoner, J. D., D. L. Lorenz, G. J. Wiche, and R. M. Goldstein, 1993. Red River of the North Basin, Minnesota, ND, and South Dakota; Water Resources Bulletin 29:4; pages 575-615.
- Thurman, Albert and Richard Miller, 1976. Secrets of Noise Control. 2nd ed. Atlanta: Fairmont Press.
- US AFI 32-7061, as promulgated in 32 C.F.R. 989, EIAP
- USAF, 2001a. Base General Plan.
- USAF, 2001b. Bird Airstrike Hazard Plan. February.
- USAF, 2001c. Grand Forks AFB Installation Hazardous Waste Management Plan.

- USAF, 1999. Final EIS for Minuteman III Missile System Dismantlement at Grand Forks AFB, ND. April
- USAF, 1997a. Grand Forks AFB Integrated Natural Resources Management Plan.
- USAF, 1997b. Management Action Plan for Grand Forks AFB.
- USAF, 1996. Grand Forks AFB Final Emissions Survey Report. January.
- USAF, 1995. AICUZ Study at Grand Forks AFB, ND.
- US Army, 1978. Construction Engineering Research Laboratory (CERL). Construction site Noise Control, Cost-Benefit Estimation Technical Background. January.
- US Bureau of the Census, 2002. 2000 Census of Population and Housing (population and demographic data.
- US Environmental Protection Agency, 1995. National Water Quality Inventory, 1994 Report to Congress. EPA 841-R-95-005. Washington D.C. December.

APPENDIX A
LOCATION MAP – GRAND FORKS AFB

Grand Forks AFB, ND













State Boundary

APPENDIX B
CULTURAL RESOURCE PROBABILITY MAP

Figure 3.5
Survey Areas and
Probabilities

Grand Forks Air Force Base
Cultural Resources Management Plan

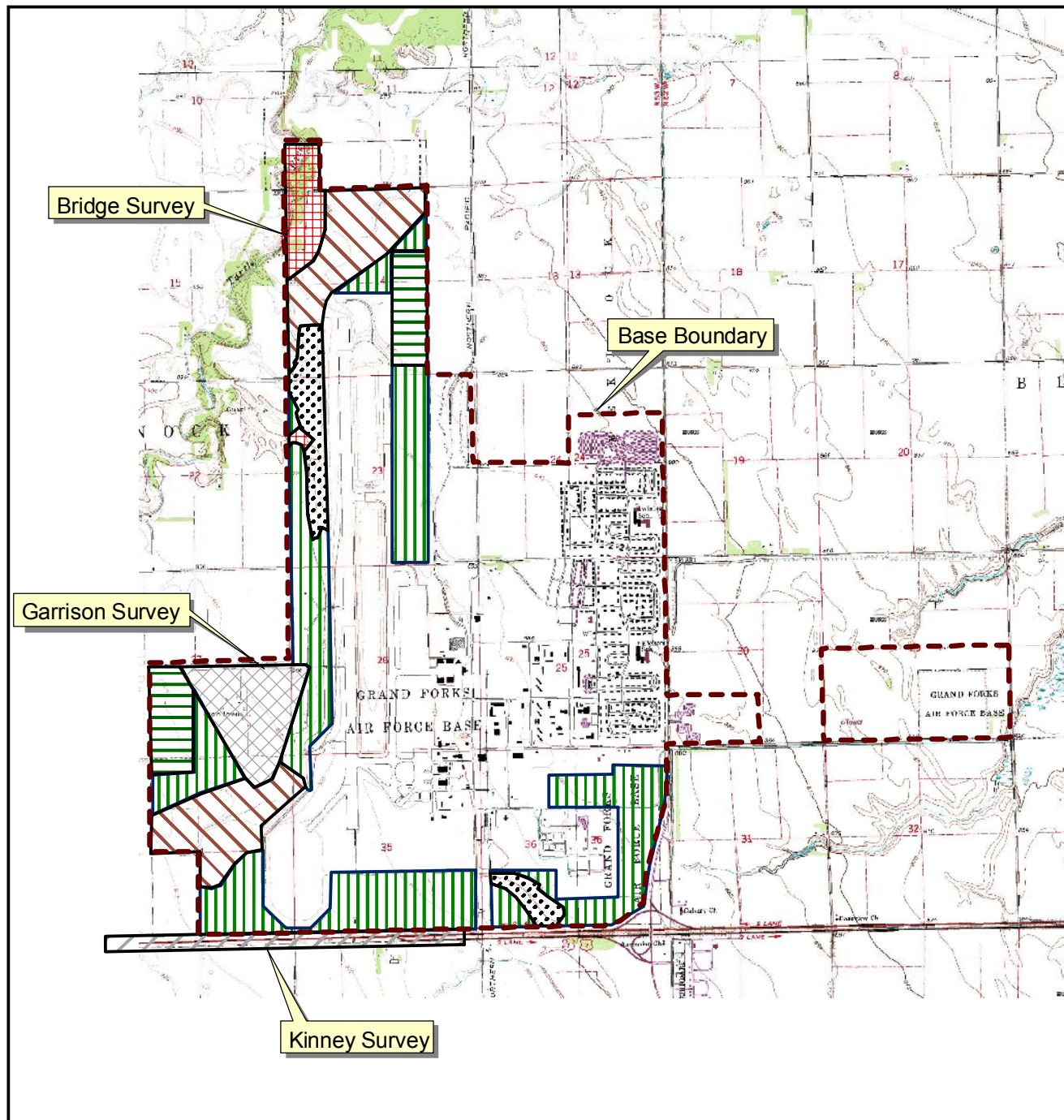
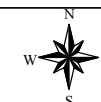
Legend

-  Historic Bridge Inventory Survey
-  Base Boundary
-  High Probability
-  Medium Probability (near water)
-  Kinney Survey
-  Medium Probability (beach ridge)
-  Peace Keeper Rail Garrison Survey
-  Low Probability (distance from water)
-  Low Probability (10% sample)
-  Previously Disturbed

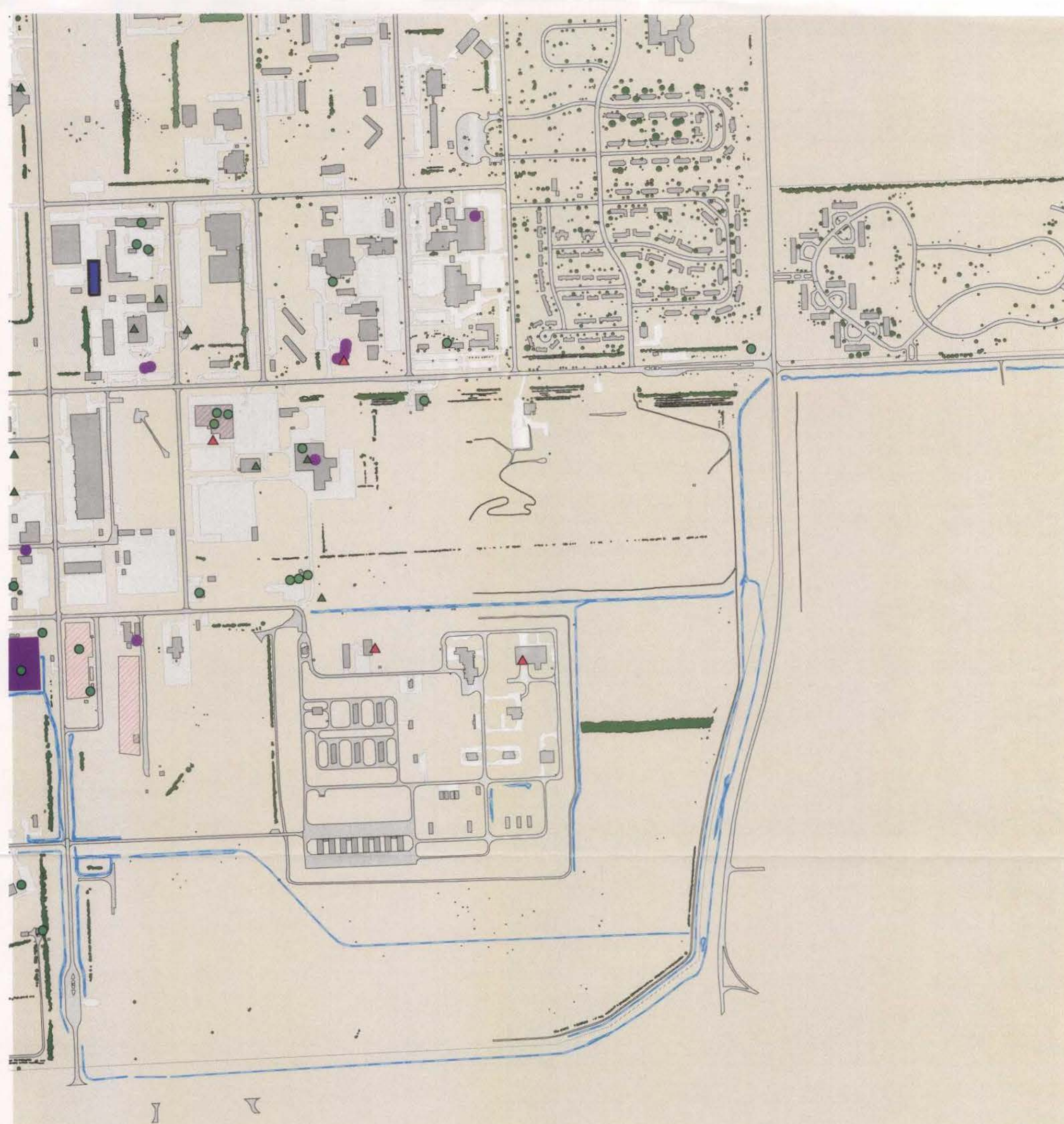
2000 0 2000 4000 Feet



Scale: 1:50000
Created By: rp/bc
File: y:\projects\federal\air force\grand forks...
Date: 5-16-02
Figure Number: 3.5
Page Number: 3-18



APPENDIX C
ENVIRONMENTAL SITE MAP



Grand Forks AFB Environmental Sites (SE)

- Above Ground Storage Tanks (Fuel)
- Abandoned Fuel Lines
- Building 622 - Acid Dip Room
- Helicopter Wash Area
- Oil/Water Separator
- Satellite Accumulation Areas (Haz Waste)
- Scrap Storage Area
- S.H.P.O. (Buildings under consideration)
- Underground Waste Storage
- Underground Storage Tanks (Fuel)
- Ditches/Streams
- IRP Sites
- Landfill Caps
- Trees

Hydrography-flood zone area
 floodplain zone centroid



08 May 01/KS



Grand Forks AFB Environmental Sites (NE)

- Above Ground Storage Tanks (Fuel)
 - ▲ Abandoned Fuel Lines
 - ▲ Building 622 - Acid Dip Room
 - Helicopter Wash Area
 - ▲ Oil/Water Separator
 - ▲ Satellite Accumulation Areas (Haz Waste)
 - ▲ Scrap Storage Area
 - S.H.P.O. (Buildings under consideration)
 - ▲ Underground Waste Storage
 - Underground Storage Tanks (Fuel)
 - Ditches/Streams
 - IRP Sites
 - Landfill Caps
 - Trees
- Hydrography-flood zone area
floodplain zone centroid



Grand Forks AFB Environmental Sites (NW)

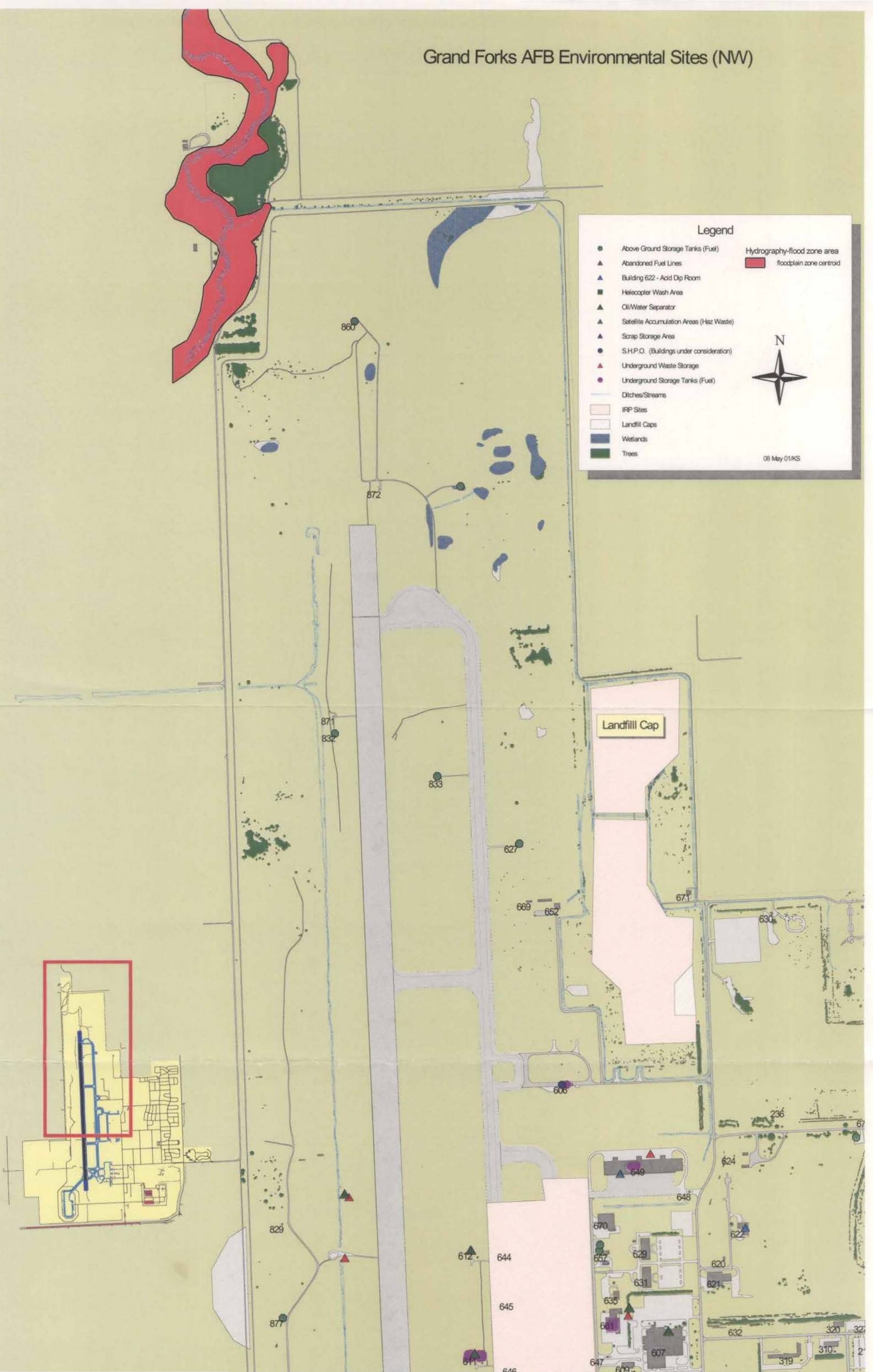
Legend

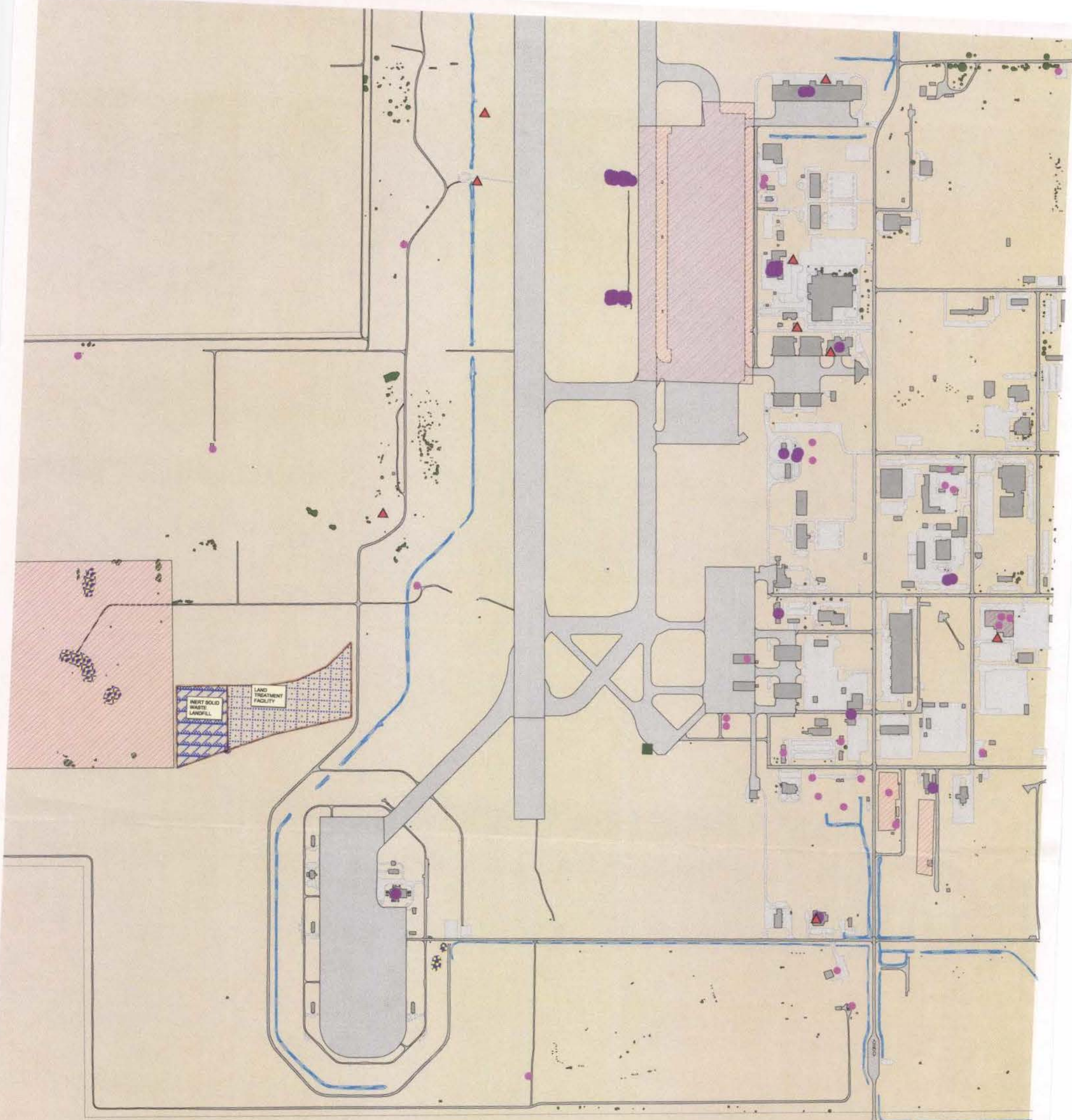
- Above Ground Storage Tanks (Fuel)
- ▲ Abandoned Fuel Lines
- ▲ Building 622 - Acid Dip Room
- Helicopter Wash Area
- ▲ Oil/Water Separator
- ▲ Satellite Accumulation Areas (Haz Waste)
- ▲ Scrap Storage Area
- S.H.P.O. (Buildings under consideration)
- ▲ Underground Waste Storage
- Underground Storage Tanks (Fuel)
- Ditches/Streams
- IRP Sites
- Landfill Caps
- Wetlands
- Trees

Hydrography-flood zone area
floodplain zone centroid

N

08 May 01/KS



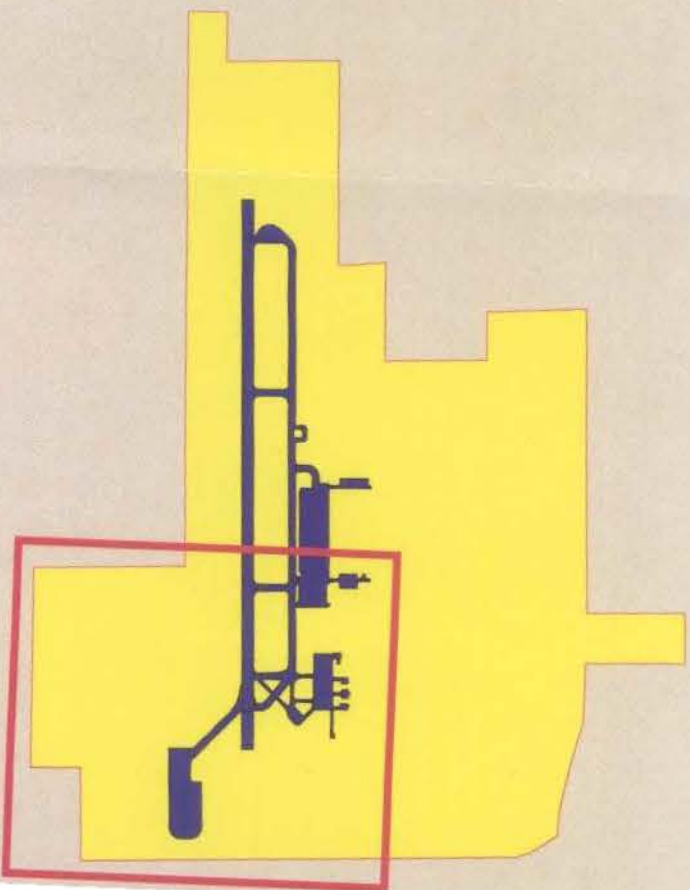


Grand Forks AFB Environmental Sites (SW)

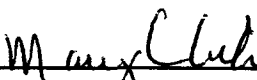
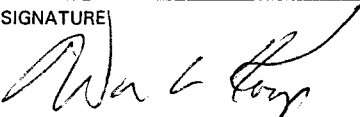
- Above Ground Storage Tanks (Fuel)
- ▲ Abandoned Fuel Lines
- ▲ Building 622 - Acid Dip Room
- Helicopter Wash Area
- ▲ Oil/Water Separator
- ▲ Satellite Accumulation Areas (Haz Waste)
- ▲ Scrap Storage Area
- S.H.P.O. (Buildings under consideration)
- ▲ Underground Waste Storage
- Underground Storage Tanks (Fuel)

Hydrography-flood zone area
floodplain zone centroid

- Ditches/Streams
- IRP Sites
- Landfill Caps
- Trees
- Wetlands



APPENDIX D
AF FORM 813

REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS		Report Control Symbol RCS: 2005-098			
INSTRUCTIONS: Section I to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).					
SECTION I - PROPONENT INFORMATION					
1. TO (Environmental Planning Function) 319 CES/CEV	2. FROM (Proponent organization and functional address symbol) 319 CES/CD	2a. TELEPHONE NO. 7-4761			
3. TITLE OF PROPOSED ACTION Replacement of Military Family Housing					
4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date) See Attached					
5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action.) See Attached					
6. PROPONENT APPROVAL (Name and Grade) MARY C. GILTNER, GS-13, DAFC Base Deputy Civil Engineer	6a. SIGNATURE 	6b. DATE 10/14/04			
SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY. (Check appropriate box and describe potential environmental effects including cumulative effects.) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)		+	0	-	U
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)			X		
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)			X		
9. WATER RESOURCES (Quality, quantity, source, etc.)			X		
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, bird/wildlife aircraft hazard, etc.)				X	
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)				X	
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)			X		
13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)			X		
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)			X		
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)		X			
16. OTHER (Potential impacts not addressed above.)			X		
SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION					
17.	<input type="checkbox"/>	PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # _____ ; OR			
	<input checked="" type="checkbox"/>	PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.			
18. REMARKS					
19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade) WAYNE A. KOOP, R.E.M., GM-13 Environmental Management Flight Chief		19a. SIGNATURE 		19b. DATE 16 Dec 04	

4.0 Purpose and Need for Action

4.1 Purpose of the Action (mission objectives-who proposes to do what, where, when): Remove nineteen housing units in Redwood housing area: 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1289, 1290, 1291, 1292, 1293, 1294, 1296, 1297, 1738, 1740, 1742, and 1744 Redwood Drive. Remove two housing units in Holly housing area: 1177 and 1179 Maxwell Ave.

4.2 Need for the Action (why this action is desired or required-why here, why now): The housing units in Redwood must be removed in FY05 to provide space for construction of new military family housing units. The housing units in Holly must be removed in FY05 to provide space for construction of new Youth Center parking lot.

4.3 Objectives for the Action (what goal do you wish to accomplish): Clear the area for new construction.

4.4 Related EISs/EAs and other documents (similar projects in the past): 97-015 EBS to Transfer Houses to Indians; 99-145 EA for Dakota Sheds Transfer; 99-072 EA for Dakota MFH Disposal; 00-088 EA for Improve MFH Parking, Patios, Fencing; 99-007 EBS to Disposal Prairie View MFH; 02-060 EA for Demolition of Penn Circle Unaccompanied Housing.

4.5 Decision that must be made: Remove the housing.

4.6 Applicable Regulatory Requirements and Required Coordination-- required permits, licenses, entitlements: Applicable regulatory requirements and required coordination include a Work Clearance Request, Stormwater Protection Plan, Dust Control Plan, Spill Control Plan, and Erosion and Sediment Control Plan.

5.0 Description of Proposed Action and Alternatives

5.1 Description of the proposed action (in brief, introduction): Offer military family housing units on Redwood Drive for transfer to an American Indian reservation in South or North Dakota through the Operation Walking Shield program.

5.2 Selection criteria for Alternatives

5.2.1 Minimum mission requirements: cost, safety, efficiency, effectiveness.

5.2.2 Minimum environmental standards : noise, air, water, safety, HW, vegetation, cultural, geology, soils, socioeconomic.

5.3 Alternatives Considered but Eliminated from Detailed Study: Remove the housing units to another location on or off base.

5.4 Description of proposed alternatives

5.4.1 No-action alternative: The units would remain standing in current location.

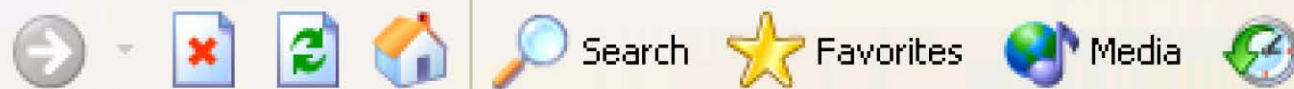
5.4.2 Proposed Action: Remove military family housing units on Redwood Drive and Maxwell Avenue. The units will transfer to an American Indian reservation in South or North Dakota through the Operation Walking Shield program.

5.4.3 Another Reasonable Action Alternative: Demolish the housing units and dispose of the debris in an inert construction debris landfill.

5.5 Description of Past and Reasonably Foreseeable Future Actions Relevant to Cumulative Impacts: Past Actions include Replacement of MFH, Phases A, D, F, G, H, J and K.

5.6 Recommendation of preferred alternative: Transfer the housing units through Operation Walking Shield.

APPENDIX E
LOCATION MAP – PROPOSED AND ALTERNATIVE SITES

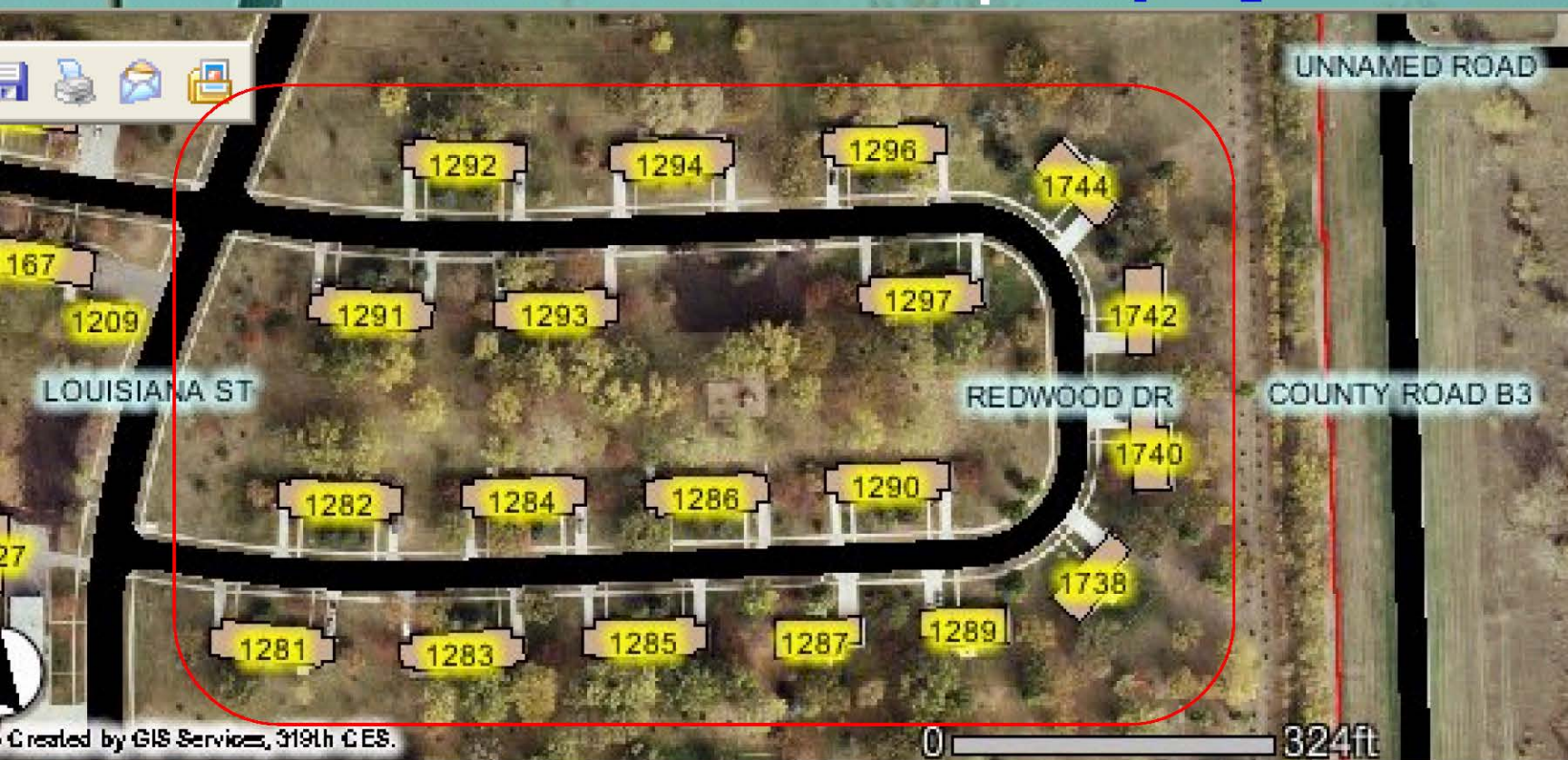


https://jfsd2csw2as101.amc.ds.af.mil/website/base_map_light/viewer.htm

and Forks Air Force Base Map



Your web counter



Visible Active



Refr

Grand Forks Air Force Base Map



Your web coun...



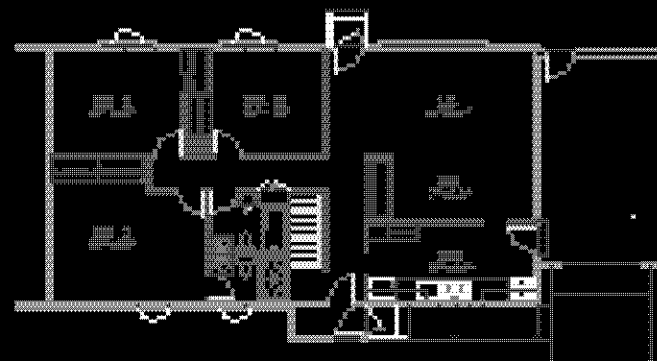
Map Created by GIS Services, 319th CES.

Visible A

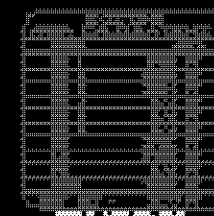


P

APPENDIX F
HOUSING LAYOUT AND REAL PROPERTY RECORDS



Haughton Revitalization Act



3.0000 PLOUSE PL44 TYPE F-000
BLANCH / MICHEL / MICHAEL
RE-EXTEND TO 1971.

Technology & Educational Innovations

1. **PROBATION**
 2. **United Nations For Women**
 3. **Dr. Helmut Schmidt**

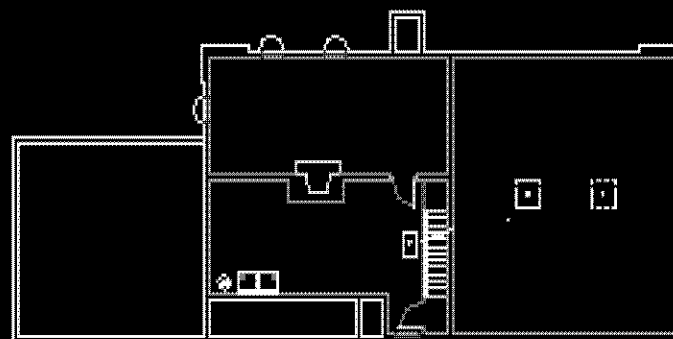
The screenshot shows a Commodore 64 screen with a text-based menu. At the top, the title "THE GREAT ESCAPE" is displayed in a large, stylized font. Below the title, there are several lines of text, including "A COMPUTER GAME BY", "DESIGNED BY", and "PROGRAMMED BY". The menu is presented in a list format with options like "PLAY", "LOAD", "SAVE", "QUIT", and "HELP". The screen has a black background with white text, and the Commodore 64 keyboard is visible at the bottom.

```

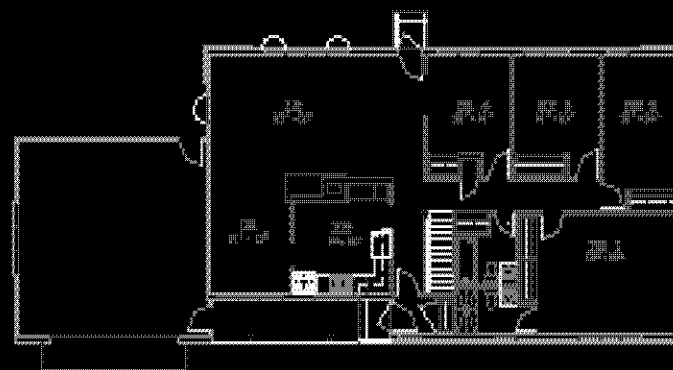
THE GREAT ESCAPE
A COMPUTER GAME BY
DESIGNED BY
PROGRAMMED BY
PLAY
LOAD
SAVE
QUIT
HELP

```

Schwartz Child Welfare Association



EXISTING BASEMENT PLAN



EXISTING FIRST FLOOR PLAN



銅子母錢


1. 1/4" = 1'-0"
 2. 1/8" = 1'-0"
 3. 1/16" = 1'-0"
 4. 1/32" = 1'-0"
 5. 1/64" = 1'-0"
 6. 1/128" = 1'-0"
 7. 1/256" = 1'-0"
 8. 1/512" = 1'-0"
 9. 1/1024" = 1'-0"
 10. 1/2048" = 1'-0"
 11. 1/4096" = 1'-0"
 12. 1/8192" = 1'-0"
 13. 1/16384" = 1'-0"
 14. 1/32768" = 1'-0"
 15. 1/65536" = 1'-0"
 16. 1/131072" = 1'-0"
 17. 1/262144" = 1'-0"
 18. 1/524288" = 1'-0"
 19. 1/1048576" = 1'-0"
 20. 1/2097152" = 1'-0"
 21. 1/4194304" = 1'-0"
 22. 1/8388608" = 1'-0"
 23. 1/16777216" = 1'-0"
 24. 1/33554432" = 1'-0"
 25. 1/67108864" = 1'-0"
 26. 1/134217728" = 1'-0"
 27. 1/268435456" = 1'-0"
 28. 1/536870912" = 1'-0"
 29. 1/1073741824" = 1'-0"
 30. 1/2147483648" = 1'-0"
 31. 1/4294967296" = 1'-0"
 32. 1/8589934592" = 1'-0"
 33. 1/17179869184" = 1'-0"
 34. 1/34359738368" = 1'-0"
 35. 1/68719476736" = 1'-0"
 36. 1/137438953472" = 1'-0"
 37. 1/274877906944" = 1'-0"
 38. 1/549755813888" = 1'-0"
 39. 1/1099511627776" = 1'-0"
 40. 1/2199023255552" = 1'-0"
 41. 1/4398046511104" = 1'-0"
 42. 1/8796093022208" = 1'-0"
 43. 1/17592186044416" = 1'-0"
 44. 1/35184372088832" = 1'-0"
 45. 1/70368744177664" = 1'-0"
 46. 1/140737488355328" = 1'-0"
 47. 1/281474976710656" = 1'-0"
 48. 1/562949953421312" = 1'-0"
 49. 1/1125899906842624" = 1'-0"
 50. 1/2251799813685248" = 1'-0"
 51. 1/4503599627370496" = 1'-0"
 52. 1/9007199254740992" = 1'-0"
 53. 1/18014398509481984" = 1'-0"
 54. 1/36028797018963968" = 1'-0"
 55. 1/72057594037927936" = 1'-0"
 56. 1/144115188075855872" = 1'-0"
 57. 1/288230376151711744" = 1'-0"
 58. 1/576460752303423488" = 1'-0"
 59. 1/1152921504606846976" = 1'-0"
 60. 1/2305843009213693952" = 1'-0"
 61. 1/4611686018427387904" = 1'-0"
 62. 1/9223372036854775808" = 1'-0"
 63. 1/18446744073709551616" = 1'-0"
 64. 1/36893488147419103232" = 1'-0"
 65. 1/73786976294838206464" = 1'-0"
 66. 1/147573952589676412928" = 1'-0"
 67. 1/295147905179352825856" = 1'-0"
 68. 1/590295810358705651712" = 1'-0"
 69. 1/1180591620717411303424" = 1'-0"
 70. 1/2361183241434822606848" = 1'-0"
 71. 1/4722366482869645213696" = 1'-0"
 72. 1/9444732965739290427392" = 1'-0"
 73. 1/18889465931478580854784" = 1'-0"
 74. 1/37778931862957161709568" = 1'-0"
 75. 1/75557863725914323419136" = 1'-0"
 76. 1/151115727451828646838272" = 1'-0"
 77. 1/302231454903657293676544" = 1'-0"
 78. 1/604462909807314587353088" = 1'-0"
 79. 1/1208925819614629174706176" = 1'-0"
 80. 1/2417851639229258349412352" = 1'-0"
 81. 1/4835703278458516698824704" = 1'-0"
 82. 1/9671406556917033397649408" = 1'-0"
 83. 1/19342813113834066795298816" = 1'-0"
 84. 1/38685626227668133590597632" = 1'-0"
 85. 1/77371252455336267181195264" = 1'-0"
 86. 1/154742504910672534362390528" = 1'-0"
 87. 1/309485009821345068724781056" = 1'-0"
 88. 1/618970019642690137449562112" = 1'-0"
 89. 1/1237940039285380274899124224" = 1'-0"
 90. 1/2475880078570760549798248448" = 1'-0"
 91. 1/4951760157141521099596496896" = 1'-0"
 92. 1/9903520314283042199192993792" = 1'-0"
 93. 1/19807040628566084398385987584" = 1'-0"
 94. 1/39614081257132168796771975168" = 1'-0"
 95. 1/79228162514264337593543950336" = 1'-0"
 96. 1/158456325028528675187087900672" = 1'-0"
 97. 1/316912650057057350374175801344" = 1'-0"
 98. 1/633825300114114700748351602688" = 1'-0"
 99. 1/1267650600228229401496703205376" = 1'-0"
 100. 1/2535301200456458802993406410752" = 1'-0"
 101. 1/5070602400912917605986812821504" = 1'-0"
 102. 1/10141204801825835211973625643008" = 1'-0"
 103. 1/20282409603651670423947251286016" = 1'-0"
 104. 1/40564819207303340847894502572032" = 1'-0"
 105. 1/81129638414606681695789005144064" = 1'-0"
 106. 1/162259276829213363391578010288128" = 1'-0"
 107. 1/324518553658426726783156020576256" = 1'-0"
 108. 1/649037107316853453566312041152512" = 1'-0"
 109. 1/1298074214633706907132624082305024" = 1'-0"
 110. 1/2596148429267413814265248164610048" = 1'-0"
 111. 1/5192296858534827628530496329220096" = 1'-0"
 112. 1/10384593717069655257060992658440192" = 1'-0"
 113. 1/20769187434139310514121985316880384" = 1'-0"
 114. 1/41538374868278621028243970633760768" = 1'-0"
 115. 1/83076749736557242056487941267521536" = 1'-0"
 116. 1/166153499473114484112975882535043072" = 1'-0"
 117. 1/332306998946228968225951765070086144" = 1'-0"
 118. 1/664613997892457936451903530140172288" = 1'-0"
 119. 1/1329227995784915872903807060280344576" = 1'-0"
 120. 1/2658455991569831745807614120560689152" = 1'-0"
 121. 1/5316911983139663491615228241121378304" = 1'-0"
 122. 1/10633823966279326983230456482242756608" = 1'-0"
 123. 1/21267647932558653966460912964485513216" = 1'-0"
 124. 1/42535295865117307932921825928971026432" = 1'-0"
 125. 1/85070591730234615865843651857942052864" = 1'-0"
 126. 1/170141183460469231731687303715884105728" = 1'-0"
 127. 1/340282366920938463463374607431768211456" = 1'-0"
 128. 1/680564733841876926926749214863536422912" = 1'-0"
 129. 1/1361129467683753853853498429727072845824" = 1'-0"
 130. 1/2722258935367507707706996859454145691648" = 1'-0"
 131. 1/5444517870735015415413993718908291383296" = 1'-0"
 132. 1/10889035741470030830827987437816582766592" = 1'-0"
 133. 1/21778071482940061661655974875633165533184" = 1'-0"
 134. 1/43556142965880123323311949751266331066368" = 1'-0"
 135. 1/87112285931760246646623899502532662132736" = 1'-0"
 136. 1/174224571863520493293247799005065324265472" = 1'-0"
 137. 1/348449143727040986586495598010130648530944" = 1'-0"
 138. 1/696898287454081973172991196020261297061888" = 1'-0"
 139. 1/1393796574908163946345982392040522594123776" = 1'-0"
 140. 1/2787593149816327892691964784081045188247552" = 1'-0"
 141. 1/5575186299632655785383929568162090376495104" = 1'-0"
 142. 1/11150372599265311570767859136324180752990208" = 1'-0"
 143. 1/22300745198530623141535718272648361505980416" = 1'-0"
 144. 1/44601490397061246283071436545296723011960832" = 1'-0"
 145. 1/89202980794122492566142873090593446023921664" = 1'-0"
 146. 1/1784059615882449851322857461811868920478432" = 1'-0"
 147. 1/3568119231764899702645714923623737840956864" = 1'-0"
 148. 1/7136238463529799405291429847247475681913728" = 1'-0"
 149. 1/14272476927059598810582859694494951363827456" = 1'-0"
 150. 1/28544953854119197621165719388989902727654912" = 1'-0"
 151. 1/57089907708238395242331438777979805455309824" = 1'-0"
 152. 1/114179815416476790484662877555959610910619648" = 1'-0"
 153. 1/228359630832953580969325755111919221821239296" = 1'-0"
 154. 1/456719261665907161938651510223838443642478592" = 1'-0"
 155. 1/913438523331814323877303020447676887284957184" = 1'-0"
 156. 1/1826877046663628647754606040895353774569914368" = 1'-0"
 157. 1/3653754093327257295509212081790707549139828736" = 1'-0"
 158. 1/7307508186654514591018424163581415098279657472" = 1'-0"
 159. 1/14615016373309029182036848327162830196559314944" = 1'-0"
 160. 1/29230032746618058364073696654325660393118629888" = 1'-0"
 161. 1/58460065493236116728147393308651320786237259776" = 1'-0"
 162. 1/116920130986472233456294786617302641572474519552" = 1'-0"
 163. 1/233840261972944466912589573234605283144949039104" = 1'-0"
 164. 1/467680523945888933825179146469210566289898078208" = 1'-0"
 165. 1/935361047891777867650358292938421132579796156416" = 1'-0"
 166. 1/1870722095783555735300716585876842265159592312832" = 1'-0"
 167. 1/3741444191567111470601433171753684530319184625664" = 1'-0"
 168. 1/7482888383134222941202866343507369060638369251328" = 1'-0"
 169. 1/14965776766268445882405732687014738121276738502656" = 1'-0"
 170. 1/29931553532536891764811465374029476242553477005312" = 1'-0"
 171. 1/59863107065073783529622930748058952485106954010624" = 1'-0"
 172. 1/119726214130147567059245861496117904970213908021248" = 1'-0"
 173. 1/239452428260295134118491722992235809940427816042496" = 1'-0"
 174. 1/478904856520590268236983445984471619880855632084992" = 1'-0"
 175. 1/957809713041180536473966891968943239761711264169984" = 1'-0"
 176. 1/1915619426082361072947933783937886479523422528339968" = 1'-0"
 177. 1/3831238852164722145895867567875772959046845056679936" = 1'-0"
 178. 1/7662477704329444291791735135751545918093690113359872" = 1'-0"
 179. 1/15324955408658888583583470271503091836187380226719744" = 1'-0"
 180. 1/30649910817317777167166940543006183672374760453439488" = 1'-0"
 181. 1/61299821634635554334333881086012367344749520906878976" = 1'-0"
 182. 1/122599643269271108668667762172024734689499041813757952" = 1'-0"
 183. 1/245199286538542217337335524344049469378998083627515904" = 1'-0"
 184. 1/490398573077084434674671048688098938757996167255031808" = 1'-0"
 185. 1/980797146154168869349342097376197877515992334510063616" = 1'-0"
 186. 1/1961594292308337738698684194752395755031984669020127232" = 1'-0"
 187. 1/3923188584616675477397368389504791510063969338040254464" = 1'-0"
 188. 1/7846377169233350954794736779009583020127938676080508928" = 1'-0"
 189. 1/15692754338466701909589473558019166040255877352161017856" = 1'-0"
 190. 1/31385508676933403819178947116038332080511754704322035712" = 1'-0"
 191. 1/62771017353866807638357894232076664161023509408644071424" = 1'-0"
 192. 1/125542034707733615276715788464153328322047018817288142848" = 1'-0"
 193. 1/251084069415467230553431576928306656644094037634576285696" = 1'-0"
 194. 1/502168138830934461106863153856613313288188075269152571392" = 1'-0"
 195. 1/1004336277661868922213726307713226626576376150538305142784" = 1'-0"
 196. 1/2008672555323737844427452615426453253152752301076610285568" = 1'-0"
 197. 1/4017345110647475688854905230852906506305504602153220571136" = 1'-0"
 198. 1/8034690221294951377709810461705813012611009204306441142272" = 1'-0"
 199. 1/16069380442589902755419620923411626025222018408612882284544" = 1'-0"
 200. 1/32138760885179805510839241846823252050444036817225764569088" = 1'-0"
 201. 1/64277521770359611021678483693646504100888073634451529138176" = 1'-0"
 202. 1/128555043540719222043356967387293008201776147268903058276352" = 1'-0"
 203. 1/257110087081438444086713934774586016403552294537806116552704" = 1'-0"
 204. 1/514220174162876888173427869549172032807104589075612233105408" = 1'-0"
 205. 1/1028440348325753776346855739098344065614209178151224466210816" = 1'-0"
 206. 1/2056880696651507552693711478196688131228418356302448932421632" = 1'-0"
 207. 1/4113761393303015105387422956393376262456836712604897864843264" = 1'-0"
 208. 1/8227522786606030210774845912786752524913673425209795729686528" = 1'-0"
 209. 1/16455045573212060421549691825573505049827346850419591459373056" = 1'-0"
 210. 1/32910091146424120843099383651147010099654693700839182918746112" = 1'-0"
 211. 1/65820182292848241686198767302294020199309387401678365837492224" = 1'-0"
 212. 1/131640364585696483372397534604588040398618774803356731674984448" = 1'-0"
 213. 1/263280729171392966744795069209176080797237549606713463349968896" = 1'-0"
 214. 1/526561458342785933489590138418352161594475099213426926699937792" = 1'-0"
 215. 1/1053122916685571866979180276836704323188950198426853853399875584" = 1'-0"
 216. 1/2106245833371143733958360553673408646377900396853707706799751168" = 1'-0"
 217. 1/4212491666742287467916721107346817292755800793707415413599502336" = 1'-0"
 218. 1/8424983333484574935833442214693634585511601587414830827199004672" = 1'-0"
 219. 1/16849966666969149871666884429387269171023203174829661654398009344" = 1'-0"
 220. 1/33699933333938299743333768858774538342046406349659323308796018688" = 1'-0"
 221. 1/67399866667876599486667537717549076684092812699318646617592037376" = 1'-0"
 222. 1/134799733335753198973335075435098153368185625398637293235184074752" = 1'-0"
 223. 1/269599466671506397946670150870196306736371250797274586470368149504" = 1'-0"
 224. 1/539198933343012795893340301740392613472742501594549172940736299008" = 1'-0"
 225. 1/1078397866686025591786680603480785226945485003189098345881472598016" = 1'-0"
 226. 1/2156795733372051183573361206961570453890970006378196691762945196032" = 1'-0"
 227. 1/4313591466744102367146722413923140907781940012756393383525890392064" = 1'-0"
 228. 1/8627182933488204734293444827846281815563880025512786767051780784128" = 1'-0"
 229. 1/17254365866976409468586889655692563631127760051025573534103561568256" = 1'-0"
 230. 1/34508731733952818937173779311385127262255520102051147068207123136512" = 1'-0"
 231. 1/69017463467905637874347558622770254524511040204102294136414246273024" =

Grand Forks AFB INSTALLATION NAME AND NO.		3348 JFSB		2-19-65 DATE		SH 45thru47 DRAWING NO.		JFSB 9968 RP ACCOUNT NO.		57111-377 CONTROL NO. F1143		1177 BUILDING NO.	
DIMENSIONS (Width x length)												CODE	
MAIN BUILDING		OFFSETS Grge		WINGS		BASEMENTS		STATE				38-735	
85'2" X 30' 4"		23'8" X 13'4" (2)				2324 SF, 8'deep		North Dakota					
								ASSIGNMENT SAC					
MATERIALS								TYPE OF CONSTRUCTION				1P	
FOUNDATION		FLOOR		WALL		ROOF		Perm					
Concrete		Wood		Wood W/Partial Brick Facing		Asphalt Shingles		CONDITION				1	
								Useable					
HEATING								OCCUPANCY				1	
SOURCE		TYPE				FUEL		AF				1	
Hot Air		Furnace				#2 Gas		AIR FORCE INTEREST				Owned 1	
NO. OF USABLE FLOORS		FIRE PROTECTION						UNIT OF MEASURE (Other than area)				FA	
1		NO.		TYPE				QUANTITY				2	
UTILITY CONNECTIONS		BLDG EQPT		NO.		TOTAL CAPACITY		NOMENCLATURE					
WATER 1"		AIR CONDITIONING						Family Housing Appropriate					
SEWER 4"		EVAPORATIVE COOLING						CATEGORY				711-14K ³	
ELECTRIC 110/220		MECHANICAL COOLING						REMARKS A-3-2 = 6 Bed 1076 Net SF BOD- 6 Apr 64 Atch Grge 638SF - 2VE H					
GAS		HOT WATER FACILITIES		1		66 Gal							
STEAM													
CONDENSATE													

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT SF		COST		TOTAL COST	
				AMOUNT	TOTAL				
210-5	2-19-65	Original Construction	10-29-64	3226	3226	26,087	74	26,087	74
211-5	2-19-65	Transfer Collateral Equip to BEMO	2-19-65			371.00		25,716.	74
211-5	2-19-65	Transfer Collateral Equip to BEMO	2-19-65			371.00		25,345.	74
224356	1 12 72	RPIE Stove & Refer				467	00	25,812	74
740005	21 Nov 73	RPIE Washer & Dryer				85	00	25 897	74
BALANCES FORWARDED								25 897	74

Grand Forks AFB		3348 JFSD	2-19-65	HA-7 thru 9 Sh 51 thru 53	JFSD 9968	C-6300 57111-379	1179		
INSTALLATION NAME AND NO.		DATE		DRAWING NO.		RP ACCOUNT NO.	CONTROL NO.	BUILDING NO.	
DIMENSIONS (Width x length)								CODE	
MAIN BUILDING	OFFSETS	GARAGE	WINGS	BASEMENTS		STATE			
62'4"x23'4"	23'8"x13'4"			2518 SF 8' deep		North Dakota		735 38	
						ASSIGNMENT			
						SAC		6S	
MATERIALS						TYPE OF CONSTRUCTION			
FOUNDATION	FLOOR	WALL		ROOF		Perm		1 P	
Conc	Wood	Wood w/partial brick facing		Asphalt Shingles		CONDITION		1	
						Useable			
HEATING						OCCUPANCY			
SOURCE	TYPE			FUEL		AF		1	
Hot Air	Furnace			#2 Gas		AIR FORCE INTEREST		1	
						Owned			
NO. OF USABLE FLOORS		FIRE PROTECTION				UNIT OF MEASURE (Other than area)			
2		NO.		TYPE		FA			
						QUANTITY		2	
UTILITY CONNECTIONS		BLDG EQPT	NO.	TOTAL CAPACITY		NOMENCLATURE			
WATER 1"		AIR CONDITIONING				Fam Hsg Appropriate			
SEWER 4"		EVAPORATIVE COOLING				CATEGORY		711-148	
ELECTRIC 110/220		MECHANICAL COOLING				REMARKS			
GAS		HOT WATER FACILITIES	1	80 Gal.		A-4-2 = 8 Bed			
STEAM						1248 Net SF			
CONDENSATE						BOD - 22 Apr 64			
						Atch Garage - 638 SF - 2 VE			
VOUCHER NO.	DATE	DESCRIPTION		DATE COMPLETED	AREA UNIT SF		COST		TOTAL COST
					AMOUNT	TOTAL			
210-5	2-19-65	Original Construction		10-29-64	3546	3546	26,085.74	26,085.74	
211-5	2-19-65	Trf Collateral Equip to BEMO		2-19-65			371.00	25,714.74	
211-5	2-19-65	Trf Collateral Equip to BEMO		2-19-65			371.00	25,343.74	
724356	1 12 72	RPIE Stove & Refer					467.00	25,810.74	
BALANCES FORWARDED									

Grand Forks AFB INSTALLATION NAME AND NO.			JFSD 3348 FEB 15 1968		GRF710-004		JFSD 5968		C6300 57111- CONTROL NO. F1111		BUILDING NO. 1281		
DIMENSIONS (Width x length)							CODE						
MAIN BUILDING		OFFSETS Grge		WINGS		BASEMENTS		STATE					
97'2"x28'		24'x12'4"				1476 SF 7' deep		North Dakota					
		24'x12'4"						ASSIGNMENT SAC					
MATERIALS							TYPE OF CONSTRUCTION						
FOUNDATION		FLOOR		WALL		ROOF		Perm					
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		CONDITION					
							Useable						
HEATING							OCCUPANCY						
SOURCE		TYPE				FUEL		AF					
Hot Air		Furnace				#2 fuel oil gas		AIR FORCE INTEREST					
								Owned					
NO. OF USABLE FLOORS		FIRE PROTECTION					UNIT OF MEASURE (Other than area)						
1		NO.		TYPE			FA						
							QUANTITY						
							2						
UTILITY CONNECTIONS				BLDG EQPT		NO.		TOTAL CAPACITY					
WATER				AIR				NOMENCLATURE					
1"				CONDITIONING				Fam Hsg Capehart					
SEWER				EVAPORATIVE				CATEGORY					
6"				COOLING				711-111					
ELECTRIC				MECHANICAL				REMARKS Net SF Ea. - 1312.8 me-3-2 F3-2 = 6F F Atch Grge 592 SF-2 VE					
110/220 V				COOLING									
GAS				COOLING									
STEAM				COOLING									
CONDENSATE				HOT WATER									
				FACILITIES									
						2							
						66 Gal							
VOUCHER NO.		DATE		DESCRIPTION		DATE COMPLETED		AREA UNIT		COST		TOTAL COST	
								AMOUNT TOTAL					
91-63		15 Feb 63		Original Fac		6 Dec 62		2760 3352 3352 3352		26,253 57		26,253 57	
103-63		15 Apr 63		Trf collateral equip		6 Dec 62				484 00		25,769 57	
60-6		11 Aug 65		Landscaping						1,359 28		27,128 85	
724356		1 12 72		RPIE Stove & Refer						467 00		27,595 85	
740005		21 Nov 73		RPIE Washer & Dryer						85 00		27,680 85	
BALANCES FORWARDED												27,680 85	


Grand Forks AFB		JF50-3348-1 HB 15 1966		GRF710-004		-9968-57111		RP ACCOUNT NO. CONTROL NO. F1111		BUILDING NO. 1282	
INSTALLATION NAME AND NO.		DATE		DRAWING NO.							
DIMENSIONS (Width x length)						CODE					
MAIN BUILDING		OFFSETS Grge		WINGS		BASEMENTS		STATE			
97'2"x28'		24'x12'4"				1476 SF 7' deep		North Dakota		735 38	
		24'x12'4"						ASSIGNMENT		SAC	
MATERIALS						TYPE OF CONSTRUCTION					
FOUNDATION		FLOOR		WALL		ROOF		Perm		UP	
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		CONDITION		Useable	
HEATING						OCCUPANCY					
SOURCE		TYPE		FUEL				AF		1	
Hot Air		Furnace		#2 fuel oil				AIR FORCE INTEREST		Owned	
NO. OF USABLE FLOORS		FIRE PROTECTION				UNIT OF MEASURE (Other than area)					
1		NO.		TYPE							
						QUANTITY					
						2					
UTILITY CONNECTIONS				BLDG EQPT		NO.		TOTAL CAPACITY		NOMENCLATURE	
WATER				AIR						Fam Hsg Capehart	
1"				CONDITIONING							
SEWER										CATEGORY	
6"										711-111	
ELECTRIC				EVAPORATIVE						REMARKS	
110/220 V				COOLING						=MC3-2 F3-2 = 6F Net SF Ea. - 1312.8 	
GAS				MECHANICAL						Atch Grge 592 SF - 2 VE	
STEAM				COOLING							
CONDENSATE				HOT WATER		2		66 Gal			

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST		TOTAL COST	
				AMOUNT	TOTAL				
91-63	15 Feb 63	Original Fac	6 Dec 62	2760 3352	2760 3352	26,253	57	26,253	57
103-63	15 Apr 63	Trf collateral equip	6 Dec 62			484	00	25,769	57
60-6	11 Aug 65	Landscaping				1,359	28	27,128	85
724356	1 12 72	BPTE Stove & Refer				467	00	27,595	85
BALANCES FORWARDED									

Grand Forks AFB		JFSD 3348		15 1963		GRF710-004		9968		57111		BUILDING NO.		1283	
INSTALLATION NAME AND NO.		DATE		DRAWING NO.		RF ACCOUNT NO.		CONTROL NO.		F111		BUILDING NO.		CODE	
DIMENSIONS (Width x length)															
MAIN BUILDING		OFFSETS Grge		WINGS		BASEMENTS		STATE				CODE			
97'2"x28'		24'x12'4"				1476 SF 7' deep		North Dakota				735 38			
		24'x12'4"						ASSIGNMENT				05			
								ADC SAC				XP			
MATERIALS															
FOUNDATION		FLOOR		WALL		ROOF		TYPE OF CONSTRUCTION				CONDITION			
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		Perm				Useable			
HEATING															
SOURCE		TYPE		FUEL		OCCUPANCY				AIR FORCE INTEREST					
Hot Air		Furnace		#2 fuel oil		AF				Owned					
NO. OF USABLE FLOORS		FIRE PROTECTION		UNIT OF MEASURE (Other than area)		QUANTITY				FA					
1		NO.		TYPE		2				2					
UTILITY CONNECTIONS		BLDG EQPT		NO.		TOTAL CAPACITY		NOMENCLATURE				CATEGORY			
WATER		AIR						Fam Hsg Capehart				711-111			
SEWER		CONDITIONING													
6"															
ELECTRIC		EVAPORATIVE						REMARKS							
110/220 V		COOLING						MC3-2 F3-2 = 6F				Net SF			
GAS		MECHANICAL						F				Ea. - 1312.8			
STEAM		COOLING													
CONDENSATE		HOT WATER						Atch Grge 592 SF - 2 VE							
		FACILITIES		2		66 Gal									
VOUCHER NO.		DATE		DESCRIPTION		DATE COMPLETED		AREA UNIT		COST		TOTAL COST			
								AMOUNT		TOTAL					
91-63		15 Feb 63		Original Fac		6 Dec 62		2760 3352		2760 3352		26,253 57			
103-63		15 Apr 63		Trf collateral equip		6 Dec 62						25,769 57			
60-6		11 Aug 65		Landscaping								27,128 85			
724356		1 12 72		Rpie Stove & Refer								27,595 85			
740005		21 Nov 73		RPIE Washer & Dryer								27,850 85			
				BALANCES FORWARDED								27,850 85			

Grand Forks AFB		JFSD 3348 FEB 15 1963		GRF710-004		9968-100 57111-2		RP ACCOUNT NO. CONTROL NO. F1111 BUILDING NO.		1284	
INSTALLATION NAME AND NO.		DATE		DRAWING NO.							
DIMENSIONS (Width x length)										CODE	
MAIN BUILDING		OFFSETS Grge		WINGS		BASEMENTS		STATE			
97'2"x28'		24'x12'4"				1476 SF 7' deep		North Dakota		38735	
		24'x12'4"						ASSIGNMENT		SAC	
MATERIALS										TYPE OF CONSTRUCTION	
FOUNDATION		FLOOR		WALL		ROOF		Perm		1 P	
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		CONDITION		Useable	
HEATING										OCCUPANCY	
SOURCE		TYPE		FUEL				AF		1	
Hot Air		Furnace		#2 fuel oil				AIR FORCE INTEREST		Owned	
NO. OF USABLE FLOORS		FIRE PROTECTION						UNIT OF MEASURE (Other than area)		FA	
1		NO.		TYPE				QUANTITY		2	
UTILITY CONNECTIONS				BLDG EQPT		NO.		TOTAL CAPACITY		NOMENCLATURE	
WATER 1"				AIR CONDITIONING						Fam Hsg Capehart	
SEWER 6"										CATEGORY	
ELECTRIC 110/220 V				EVAPORATIVE COOLING						711-111	
GAS				MECHANICAL COOLING						REMARKS	
STEAM										MC3-2 F3-2 = 6F	
CONDENSATE				HOT WATER FACILITIES		2		66 Gal		Net SF Ea. - 1312.8	
										F	
										Atch Grge 592 SF - 2 VE	
VOUCHER NO.		DATE		DESCRIPTION		DATE COMPLETED		AREA UNIT		COST	
								AMOUNT TOTAL		TOTAL COST	
91-63		15 Feb 63		Original Fac		6 Dec 62		3352-2760 -3352-3352		26,253 57	
103-63		15 Apr 63		Trf collateral equip		6 Dec 62				484 00	
60-6		11 Aug 65		Landscaping						1,359 28	
724356		1 12 72		RPIE Stove & Refer						467 00	
BALANCES FORWARDED											

Grand Forks AFB		JFSD-3348		FILED 15 1963		GRF710-004		9968		57111		1285	
INSTALLATION NAME AND NO.				DATE		DRAWING NO.		RP ACCOUNT NO.		CONTROL NO. F1111		BUILDING NO.	
DIMENSIONS (Width x length)												CODE	
MAIN BUILDING		OFFSETS Grge		WINGS		BASEMENTS		STATE					
97'2"x28'		24'x12'4"				1476 SF 7' deep		North Dakota				38 755	
		24'x12'4"						ASSIGNMENT				SAC	
MATERIALS								TYPE OF CONSTRUCTION					
FOUNDATION		FLOOR		WALL		ROOF		Perm				2P	
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		CONDITION				Useable	
HEATING								OCCUPANCY				1	
SOURCE		TYPE				FUEL		AF				1	
Hot Air		Furnace				#2 fuel oil		AIR FORCE INTEREST				Owned	
NO. OF USABLE FLOORS		FIRE PROTECTION						UNIT OF MEASURE (Other than area)				1	
1		NO.		TYPE				QUANTITY				FA	
												2	
UTILITY CONNECTIONS				BLDG EQPT		NO.		TOTAL CAPACITY		NOMENCLATURE			
WATER 1"				AIR CONDITIONING						Fam Hsg Capehart			
SEWER 6"										CATEGORY			
				EVAPORATIVE COOLING						711-111			
ELECTRIC 110/220 V				MECHANICAL COOLING						REMARKS			
GAS				HOT WATER FACILITIES						MC3-2 F3-2 = 6F Net SF Ea. - 1312.8			
STEAM										F			
CONDENSATE						2		66 Gal		Atch Grge 592 SF - 2 VE			
VOUCHER NO.		DATE		DESCRIPTION		DATE COMPLETED		AREA UNIT		COST		TOTAL COST	
								AMOUNT TOTAL					
91-63		15 Feb 63		Original Fac		6 Dec 62		2760 2760 3352 3352		26,253 57		26,253 57	
103-63		15 Apr 63		Trf collateral equip		6 Dec 62				484 00		25,769 57	
60-6		11 Aug 65		Landscaping						1,359 28		27,128 85	
524005		1 11 62		RPIE Stove & Refer						467 00		27,595 85	
740005		21 Nov 73		RPIE Washer & Dryer						255 00		27,850 85	
BALANCES FORWARDED												27,850 85	

Grand Forks AFB		JFSD 3948	FEB 15 1968	RF710-004	9968 JFSD	46300	1286	
INSTALLATION NAME AND NO.		DATE	DRAWING NO.		RP ACCOUNT NO.	CONTROL NO. F111	BUILDING NO.	
DIMENSIONS (Width x length)							CODE	
MAIN BUILDING	OFFSETS Grge	WINGS	BASEMENTS		STATE			
97'2"x28'	24'x12'4"		1476 SF 7' deep		North Dakota		38735	
	24'x12'4"				ASSIGNMENT			
					ADE SAC		OS	
MATERIALS					TYPE OF CONSTRUCTION			
FOUNDATION	FLOOR	WALL	ROOF		Perm		XP	
Conc	Wood	Wood frame w/ partial brick	Wood deck w/ asphalt shingle		CONDITION			
					Useable		1	
HEATING					OCCUPANCY			
SOURCE	TYPE		FUEL		AF		1	
Hot Air	Furnace		gas #2 fuel oil		AIR FORCE INTEREST			
					Owned		1	
NO. OF USABLE FLOORS	FIRE PROTECTION				UNIT OF MEASURE (Other than area)			
1	NO.	TYPE			QUANTITY		FA	
							2	
UTILITY CONNECTIONS		BLDG EQPT	NO.	TOTAL CAPACITY		NOMENCLATURE		
WATER 1"		AIR CONDITIONING				Fam Hsg Capehart		
SEWER 6"						CATEGORY		
ELECTRIC 110/220 V		EVAPORATIVE COOLING				711-111		
GAS		MECHANICAL COOLING				REMARKS		
STEAM						MC3-2 F3-2 = 6F  Net SF Ea. - 1312.8		
CONDENSATE		HOT WATER FACILITIES	2	66 Gal		Atch Grge 592 SF - 2 VE		
VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST		TOTAL COST
				AMOUNT	TOTAL			
91-63	15 Feb 63	Original Fac	6 Dec 62	2760 2352	2760 3352 3352-	26,253	57	26,253 57
103-63	15 Aug 63	Trf collateral equip	6 Dec 62			484	00	25,769 57
60-6	11 Aug 65	Landscaping				1359	28	27,128 85
Z24356	1 12 72	RPIE Stove & Refer				467	00	27,595 85
BALANCES FORWARDED								

Grand Forks AFB INSTALLATION NAME AND NO.		JFSD 3348 FEB 15 1963		GRF710-004 DRAWING NO.		JFSD 9968 <u>C6300</u> RP ACCOUNT NO. CONTROL NO. <u>F111</u>		BUILDING NO. 1287	
DIMENSIONS (Width x length)						CODE			
MAIN BUILDING		OFFSETS		WINGS		BASEMENTS		STATE	
60'8"x31'2"		23'8" X 22'				760 SF 7' deep		North Dakota	
						ASSIGNMENT			
						ADC SAC			
MATERIALS						TYPE OF CONSTRUCTION			
FOUNDATION		FLOOR		WALL		ROOF		Perm	
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		CONDITION	
						Useable			
HEATING						OCCUPANCY			
SOURCE		TYPE			FUEL		AF		
Hot Air		Furnace			#2 fuel oil ^{gas}		AIR FORCE INTEREST		
							Owned		
NO. OF USABLE FLOORS		FIRE PROTECTION				UNIT OF MEASURE (Other than area)			
1		NO.		TYPE		FA			
						QUANTITY			
						1			
UTILITY CONNECTIONS				BLDG EQPT		NO.		TOTAL CAPACITY	
WATER				AIR				NOMENCLATURE	
1"				CONDITIONING				Fam Hsg Capehart	
SEWER				EVAPORATIVE				CATEGORY	
6"				COOLING				711-111	
ELECTRIC				MECHANICAL				REMARKS	
110/220				COOLING				-CH-1 Net SF	
GAS				HOT WATER				S4-1 = 4S 1614.1	
STEAM				FACILITIES					
CONDENSATE				1		80 Gal		Atch Grge 517 SF - 2 VE	
				1		52 gal			

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST		TOTAL COST	
				AMOUNT	TOTAL				
91-63	15 Feb 63	Original Fac	6 Dec 62	1809 2326	1809 2326	18,230	25	18,230	25
103-63	15 Apr 63	Trf collateral equip	6 Dec 62			417	00	17,813	25
57-64	1-29-64	" " "	12-10-63	-	-	134	00	17,679	25
17-65	31 Jul 64	Pick Up Dishwasher as Installed Property	31 Jul 64	-	-	134	00	17,813	25
60-6	11 Aug 65	Landscaping				1,359	28	19,172	53
BALANCES FORWARDED									

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST		TOTAL COST	
				AMOUNT	TOTAL				
		BALANCES FORWARDED			2,326			19,172	53
14-72	10 Aug 71	Constr Patio (W.O. #50288)	7-71			530	00	19,702	53
724356	1 12 72	RPIE Stove & Refer				233	50	19,936	03
724425	25 Feb 72	Patios (WO#52129)	11-71			635	85	20,571	88
740005	21 Nov 73	RPIE Washer & Dryer				85	00	20,656	88
BALANCES FORWARDED									

Grand Forks AFB INSTALLATION NAME AND NO.		JFSD 9948 FEB 15 1963		GRF710-004		JFSD 9968 RP ACCOUNT NO.		66300 57111 CONTROL NO. F1111		1289 BUILDING NO.	
DIMENSIONS (Width x length)										CODE	
MAIN BUILDING		OFFSETS		WINGS		BASEMENTS		STATE			
60'8"x31'2"		23'6" X 22"				760 SF 7' deep		North Dakota		38735	
								ASSIGNMENT		SAC	
MATERIALS								TYPE OF CONSTRUCTION		Perm	
FOUNDATION		FLOOR		WALL		ROOF		CONDITION		Useable	
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle				/	
HEATING								OCCUPANCY		AF	
SOURCE		TYPE				FUEL		AIR FORCE INTEREST		Owned	
Hot Air		Furnace				#2 fuel oil				/	
NO. OF USABLE FLOORS		FIRE PROTECTION						UNIT OF MEASURE (Other than area)		FA	
1		NO.		TYPE				QUANTITY		1	
UTILITY CONNECTIONS				BLDG EQPT		NO.		TOTAL CAPACITY		NOMENCLATURE	
WATER 1"				AIR CONDITIONING						Fam Hsg Capehart	
SEWER 6"				EVAPORATIVE COOLING						CATEGORY	
ELECTRIC 110/220				MECHANICAL COOLING						711-111	
GAS				HOT WATER FACILITIES		1 =		30 Gal 52 gal		REMARKS	
STEAM										CH-1 S4-1 = 4S Net SF 1614.1	
CONDENSATE										Atch Grge 512 SF - 2 VE	
VOUCHER NO.		DATE		DESCRIPTION		DATE COMPLETED		AREA UNIT		COST	
								AMOUNT		TOTAL	
91-63		15 Feb 63		Original Fac		6 Dec 62		1800 2326		1800 2326	
103-63		15 Apr 63		Trf collateral equip		6 Dec 62				1,17 00	
57-64		1-29-64		" " "		12-10-63				-131 00	
17-65		31 Jul 64		Pick Up Dishwashers As Installed Property		31 Jul 64		-		134 00	
60-8		11 Aug 65		Landscaping						1,359 28	
BALANCES FORWARDED											

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST		TOTAL COST	
				AMOUNT	TOTAL				
		BALANCES FORWARDED			2326			19,172	53
14-72	10 Aug 71	Constr Patio (W.O. #50288)	7-71			530	00	19702	53
724356	1 12 72	RPIE Stove & Refer				233	50	19,936	03
721125	25 Feb 72	Patios (WO#52129)	11-71			635	85	20,571	88
740005	21 Nov 73	RPIE Washer & Dryer				255	00	20,826	88
BALANCES FORWARDED									

Grand Forks AFB INSTALLATION NAME AND NO.		JFSD 3346 FEB 15 1963		GREF710-004 DRAWING NO.		9968 JFSD 06300 57111- RP ACCOUNT NO. CONTROL NO. FIII		BUILDING NO. 1290					
DIMENSIONS (Width x length)						CODE							
MAIN BUILDING		OFFSETS Grge		WINGS		BASEMENTS		STATE					
97'2"x28'		24'x12'4"				1476 SF 7' deep		North Dakota					
		24'x12'4"						ASSIGNMENT					
								SAC					
MATERIALS						TYPE OF CONSTRUCTION							
FOUNDATION		FLOOR		WALL		ROOF		Perm					
Conc		Wood		Wood frame w/ Partial brick		Wood deck w/ asphalt shingle		CONDITION					
								Useable					
HEATING						OCCUPANCY							
SOURCE		TYPE		FUEL		AF		1					
Hot Air		Furnace		#2 fuel oil		AIR FORCE INTEREST		Owned					
NO. OF USABLE FLOORS		FIRE PROTECTION				UNIT OF MEASURE (Other than area)							
1		NO.		TYPE		QUANTITY							
						2							
UTILITY CONNECTIONS				BLDG EQPT		NO.		TOTAL CAPACITY					
WATER				AIR				NOMENCLATURE					
1"				CONDITIONING				Fam Hsg Capehart					
SEWER				EVAPORATIVE				CATEGORY					
6"				COOLING				711-111					
ELECTRIC				MECHANICAL				REMARKS					
110/220 V				COOLING				=MC3-2 F3-2 = 6F Net SF					
GAS				HOT WATER				Ea. - 1312.8					
STEAM				FACILITIES				From Building Log 1100-890-8					
CONDENSATE						2		66 Gal					
VOUCHER NO.		DATE		DESCRIPTION		DATE COMPLETED		AREA UNIT		COST		TOTAL COST	
								AMOUNT TOTAL					
91-63		15 Feb 63		Original Fac		6 Dec 62		2760 3352 2760 3352		26,253 57		26,253 57	
103-63		15 Apr 63		Trf collateral equip		6 Dec 62				484 00		25,769 57	
60-6		11 Aug 65		Landscaping						1,359 28		27,128 85	
724356		1 12 72		RPIE Stove & Refer						467 00		27,595 85	
740005		21 Nov 73		RPIE Washer & Dryer						85 00		27,680 85	
BALANCES FORWARDED													

Grand Forks AFB INSTALLATION NAME AND NO.		JFSD 3348		FEB 15 1963 DATE		RF710-004 DRAWING NO.		9968 JFSD 57111 RP ACCOUNT NO. CONTROL NO. F1111		BUILDING NO. 1291			
DIMENSIONS (Width x length)								CODE					
MAIN BUILDING		OFFSETS Grge		WINGS		BASEMENTS		STATE		38 735			
97'24" x 28'		24'x12'4"				1476 SF 7' deep		North Dakota					
		24'x12'4"						ASSIGNMENT		05			
MATERIALS								TYPE OF CONSTRUCTION		1P			
FOUNDATION		FLOOR		WALL		ROOF		Perm					
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		CONDITION		1			
HEATING								OCCUPANCY		1			
SOURCE		TYPE				FUEL		AF		1			
Hot Air		Furnace				gas #2 fuel oil		AIR FORCE INTEREST		1			
NO. OF USABLE FLOORS		FIRE PROTECTION						UNIT OF MEASURE (Other than area)		FA			
1		NO.		TYPE				QUANTITY		2			
UTILITY CONNECTIONS				BLDG EQPT		NO.		TOTAL CAPACITY		NOMENCLATURE			
WATER 1"				AIR CONDITIONING						Fam Hsg Capehart			
SEWER 6"				EVAPORATIVE COOLING						CATEGORY			
ELECTRIC 110/220 V				MECHANICAL COOLING						711-111			
GAS				HOT WATER FACILITIES						REMARKS			
STEAM										=MC3-2 F3-2 = 6R Net SF Ea. - 1312.8 F			
CONDENSATE				2		66 Gal		Atch Grge 592 SF - 2 VE					
VOUCHER NO.		DATE		DESCRIPTION		DATE COMPLETED		AREA UNIT		COST		TOTAL COST	
								AMOUNT TOTAL					
91-63		15 Feb 63		Original Fac		6 Dec 62		2760 3352 2760 3352		26,253 57		26,253 57	
103-63		15 Apr 63		Trf collateral equip		6 Dec 62				484 00		25,769 57	
60-6		11 Aug 65		Landscaping						1,359 28		27,128 85	
724356		1 12 72		RPIE Stove & Refer						467 00		27,595 85	
BALANCES FORWARDED													

Grand Forks AFB		JFSD-3348		FEB 15 1962		GREF710-004		JFSD 9968		66300		57111		BUILDING NO.		1292	
DIMENSIONS (Width x length)																CODE	
MAIN BUILDING		OFFSETS Grge		WINGS		BASEMENTS		STATE				North Dakota				755 38	
97'2"x28'		24'x12'4"				1476SF 7' deep		ASSIGNMENT				SAC				05	
		24'x12'4"						TYPE OF CONSTRUCTION				Perm				1P	
FOUNDATION		FLOOR		WALL		ROOF		CONDITION				Useable				1	
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		OCCUPANCY				AF				1	
SOURCE		TYPE		FUEL		AIR FORCE INTEREST				Owned				1			
Hot Air		Furnace		#2 fuel oil		UNIT OF MEASURE (Other than area)								FA			
NO. OF USABLE FLOORS		FIRE PROTECTION		QUANTITY				2									
1		NO.		TYPE		NOMENCLATURE				Fam Hsg Capehart							
UTILITY CONNECTIONS		BLDG EQPT		NO.		TOTAL CAPACITY		CATEGORY				711-111					
WATER		AIR CONDITIONING						REMARKS				<div style="text-align: center;"> MC3-2 = F3-2 = 6F Net SF Ea. - 1312.8 Atch Grge 592 SF - 2 VE </div>					
SEWER		EVAPORATIVE COOLING															
ELECTRIC		MECHANICAL COOLING															
GAS		HOT WATER FACILITIES		2		66 Gal											
STEAM																	
CONDENSATE																	

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST		TOTAL COST	
				AMOUNT	TOTAL				
91-63	15 Feb 63	Original Fac	6 Dec 62	2760 3352	2760 3352	26,253	57	26,253	57
103-63	15 Apr 63	Trf collateral equip	6 Dec 62			484	00	25,769	57
60-6	11 Aug 65	Landscaping				1,359	28	27,128	85
724356	1 12 72	RPIE Stove & Refer				467	00	27,595	85
740005	21 Nov 73	RPIE Washer & Dryer				255	00	27,850	85
BALANCES FORWARDED								27,850	85

Grand Forks AFB INSTALLATION NAME AND NO.		JFSD 3348 FEB 15 1963 DATE		GREF710-004 DRAWING NO.		JFSD 3352 RP ACCOUNT NO.		57111 CONTROL NO.		BUILDING NO.		1293	
DIMENSIONS (Width x length)										CODE			
MAIN BUILDING		OFFSETS Grge		WINGS		BASEMENTS		STATE		North Dakota			
97'2"x28'		24'x12'4"				1476 SF 7' deep		ASSIGNMENT		SAC			
		24'x12'4"						TYPE OF CONSTRUCTION		Perm			
FOUNDATION		FLOOR		WALL		ROOF		CONDITION		Useable			
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		OCCUPANCY		AF			
HEATING		TYPE		FUEL				AIR FORCE INTEREST		Owned			
SOURCE		Hot Air		Furnace		#2 fuel oil		UNIT OF MEASURE (Other than area)		FA			
NO. OF USABLE FLOORS		1		FIRE PROTECTION				QUANTITY		2			
UTILITY CONNECTIONS		BLDG EQPT		NO.		TOTAL CAPACITY		NOMENCLATURE		Fam Hsg Capehart			
WATER		1"		AIR CONDITIONING				CATEGORY		711-111			
SEWER		6"		EVAPORATIVE COOLING				REMARKS		<p>MC3-2 F3-2 = 6F Net SF</p> <p>Ea. - 1312.8</p> <p>F</p> <p>Atch Grge 592 SF - 2 VE</p>			
ELECTRIC		110/220 V		MECHANICAL COOLING									
GAS				HOT WATER FACILITIES		2				66 Gal			
STEAM													
CONDENSATE													

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST	TOTAL COST
				AMOUNT	TOTAL		
91-63	15 Feb 63	Original Fac	6 Dec 62	2760 3352	2760 3352	26,253.57	26,253.57
103-63	15 Apr 63	Trf collateral equip	6 Dec 62			484.00	25,769.57
60-6	11 Aug 65	Landscaping				1,359.28	27,128.85
724356	1 12 72	RPIE Stove & Refer				167.00	27,595.85
740005	21 Nov 73	RPIE Washer & Dryer				255.00	27,850.85
BALANCES FORWARDED							27850.85

Grand Forks AFB		JFSD 3348	FEB 15 1963	GRE710-004	JFSD 3348	57111	BUILDING NO. 1294	
DIMENSIONS (Width x length)					STATE		CODE	
MAIN BUILDING	OFFSETS	WINGS	BASEMENTS		North Dakota		735 38	
97'2"x28'	24'x12'4"		1476 SF 7' deep		ASSIGNMENT		SAC	
	24'x12'4"				TYPE OF CONSTRUCTION		Perm	
MATERIALS					CONDITION		Useable	
FOUNDATION	FLOOR	WALL	ROOF		OCCUPANCY		AF	
Conc	Wood	Wood frame w/ partial brick	Wood deck w/ asphalt shingle		AIR FORCE INTEREST		Owned	
HEATING					UNIT OF MEASURE (Other than area)		FA	
SOURCE	TYPE		FUEL		QUANTITY		2	
Hot Air	Furnace		#2 fuel oil		NOMENCLATURE		Fam Hsg Capehart	
NO. OF USABLE FLOORS	FIRE PROTECTION				CATEGORY		711-111	
1	NO.	TYPE		REMARKS		MC3-2 F3-2 = 6F Net SF Ea. - 1312.8		
UTILITY CONNECTIONS		BLDG EQPT	NO.	TOTAL CAPACITY		F		
WATER		AIR CONDITIONING				Arch Grge 592 SF - 2 VE		
SEWER		EVAPORATIVE COOLING						
ELECTRIC	110/220 V	MECHANICAL COOLING						
GAS		HOT WATER FACILITIES	2	66 Gal				
STEAM								
CONDENSATE								
VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST		TOTAL COST
				AMOUNT	TOTAL			
91-63	15 Feb 63	Original Fac	6 Dec 62	2760 3352	2760 3352	26,253	57	26,253 57
103-63	15 Apr 63	Trf collateral equip	6 Dec 62			484	00	25,769 57
60-6	11 Aug 65	Landscaping				1,359	28	27,128 85
Z24356	1 12 72	RPT Stove & Refer				467	00	27,595 85
BALANCES FORWARDED								

Grand Forks AFB INSTALLATION NAME AND NO.				JFSO 3348 FEB 15 1963 DATE		JFSO 9968 RF710-004 DRAWING NO.		JFSO 66300 57111 CONTROL NO. F1111		BUILDING NO. 1296			
DIMENSIONS (Width x length)								CODE					
MAIN BUILDING		OFFSETS Grge		WINGS		BASEMENTS		STATE		735 38			
97'2"x28'		24'x12'4"				1476 SF 7' deep		North Dakota					
		24'x12'4"						ASSIGNMENT		SAC			
MATERIALS								TYPE OF CONSTRUCTION		P			
FOUNDATION		FLOOR		WALL		ROOF		Perm					
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		CONDITION		Useable			
HEATING								OCCUPANCY		1			
SOURCE		TYPE				FUEL		AF		1			
Hot Air		Furnace				#2 fuel oil		AIR FORCE INTEREST		Owned			
NO. OF USABLE FLOORS		FIRE PROTECTION						UNIT OF MEASURE (Other than area)		FA			
1		NO.		TYPE				QUANTITY		2			
UTILITY CONNECTIONS				BLDG EQPT		NO.		TOTAL CAPACITY		NOMENCLATURE			
WATER 1"				AIR CONDITIONING						Fam Hsg Capehart			
SEWER 6"				EVAPORATIVE COOLING						CATEGORY			
ELECTRIC 110/220 V				MECHANICAL COOLING						711-111			
GAS				HOT WATER FACILITIES						REMARKS			
STEAM										-MG3-2- F3-2 = 6F Net SF Ea. - 1312.8			
CONDENSATE						2		66 Gal		F Atch Grge 592 SF - 2 VE			
VOUCHER NO.		DATE		DESCRIPTION		DATE COMPLETED		AREA UNIT		COST		TOTAL COST	
								AMOUNT TOTAL					
91-63		15 Feb 63		Original Fac		6 Dec 62		2760 3352 3352		26,253 57		26,253 57	
103-63		15 Apr 63		Trf collateral equip		6 Dec 62				484 00		25,769 57	
60-6		11 Aug 65		Landscaping						1,359 28		27,128 85	
Z24356		1 12 72		RPIE Stove & REfer						467 00		27,595 85	
740005		21 NOV 73		RPIE Washer & Dryer						170 00		27,765 85	
BALANCES FORWARDED												27,765 85	

Grand Forks AFB		JFSD 3348		GRF710-004		JFSD 3352		BUILDING NO. 1297	
INSTALLATION NAME AND NO.		DATE FEB 15 1963		DRAWING NO.		RP ACCOUNT NO. 9968		CONTROL NO. F III	
DIMENSIONS (Width x length)								CODE	
MAIN BUILDING		OFFSETS Grge		WINGS		BASEMENTS		STATE	
97'2"x28'		24'x12'4"				1476 SF 7' deep		North Dakota	
		24'x12'4"						ASSIGNMENT	
								ADC SAC	
MATERIALS						TYPE OF CONSTRUCTION			
FOUNDATION		FLOOR		WOOD		WOOD		Perm	
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		CONDITION	
								Useable	
HEATING						OCCUPANCY			
SOURCE		TYPE		FUEL		AF		1	
Hot Air		Furnace		#2 fuel oil		AIR FORCE INTEREST		Owned	
NO. OF USABLE FLOORS		FIRE PROTECTION				UNIT OF MEASURE (Other than area)		FA	
1		NO.		TYPE		QUANTITY		2	
UTILITY CONNECTIONS				BLDG EQPT		NO.		TOTAL CAPACITY	
WATER 1"				AIR CONDITIONING				NOMENCLATURE	
SEWER 6"				EVAPORATIVE COOLING				Fam Hsg Capehart	
ELECTRIC 110/220 V				MECHANICAL COOLING				CATEGORY	
GAS				HOT WATER FACILITIES		2		711-111	
STEAM								REMARKS	
CONDENSATE				66 Gal				MG3-2 F3-2 = 6F Net SF Ea. - 1312.8 F Atch Grge 592 SF - 2 VE	
VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST		TOTAL COST	
				AMOUNT	TOTAL				
91-63	15 Feb 63	Original Fac	6 Dec 62	3352	3352	26,253	57	26,253	57
103-63	15 Apr 63	Trf collateral equip	6 Dec 62			484	00	25,769	57
60-6	11 Aug 65	Landscaping				1,359	28	27,128	85
724356	1 12 72	RPIE Stove & Refer				467	00	27,595	85
740005	21 Nov 73	RPIE Washer & Dryer				85	00	27,680	85
BALANCES FORWARDED								27,680	85

Grand Forks AFB		3348 HEB 15 1961		GRF710-004		9968-57111		1738	
INSTALLATION NAME AND NO.		DATE		DRAWING NO.		RP ACCOUNT NO.		BUILDING NO.	
DIMENSIONS (Width x length)						F III		CODE	
MAIN BUILDING		OFFSETS		WINGS		BASEMENTS		STATE	
60'8"x31'2"		23'6" X 22'				760 SF 7' deep		North Dakota	
						ASSIGNMENT		73-38	
						ABC SAC		PS	
MATERIALS						TYPE OF CONSTRUCTION		XP	
FOUNDATION		FLOOR		WALL		ROOF		Perm	
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		Useable	
HEATING						OCCUPANCY		AF	
SOURCE		TYPE		FUEL		AIR FORCE INTEREST		Owned	
Hot Air		Furnace		#2 fuel oil gas				/	
NO. OF USABLE FLOORS		FIRE PROTECTION				UNIT OF MEASURE (Other than area)		FA	
1		NO.		TYPE		QUANTITY		1	
UTILITY CONNECTIONS				BLDG EQPT		NO.		TOTAL CAPACITY	
WATER				AIR				NOMENCLATURE	
1"				CONDITIONING				Fam Hsg Capehart	
SEWER								CATEGORY	
6"				EVAPORATIVE				711-111	
ELECTRIC				COOLING				REMARKS	
110/220				MECHANICAL				CH-1 S4-1 = 4S Net SF 1614.1 1742 1742 Atch Grge 517 SF - 2 VE 1742	
GAS				COOLING					
STEAM				HOT WATER					
CONDENSATE				FACILITIES					
VOUCHER NO.		DATE		DESCRIPTION		DATE COMPLETED		AREA UNIT	
								COST	
								TOTAL COST	
91-63		15 Feb 63		Original Fac		6 Dec 62		18,230 25	
103-63		15 Apr 63		Trf collateral equip		6 Dec 62		417 00	
57-64		1-29-64		" " "		12-10-63		17,679 25	
17-65		31 Jul 64		Pick Up Dishwashers as Installed Property		31 Jul 64		17,813 25	
60-6		11 Aug 65		Landscaping				19,172 53	
BALANCES FORWARDED								19,172 53	

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST	TOTAL COST
				AMOUNT	TOTAL		
		BALANCES FORWARDED			2326		19,172 53
724356	1 12 72	RPIE Stove & Refer				233 50	19,406 03
BALANCES FORWARDED							

REAL PROPERTY ACCOUNTABLE RECORD - BUILDINGS

Bld 1740

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST		TOTAL COST	
				AMOUNT	TOTAL				
		BALANCES FORWARDED			2326			19,172	53
724356	1 12 72	Stove & Refer				233	50	19,106	03
BALANCES FORWARDED									

Grand Forks AFB				JFSD 3348		DATE		GREF710-004		RP ACCOUNT NO. 3968		CONTROL NO. 57111		BUILDING NO. 1742			
DIMENSIONS (Width x length)										CODE							
MAIN BUILDING		OFFSETS		WINGS		BASEMENTS		STATE				North Dakota		38735			
60'8"x31'2"		23'6" X 22'				760 SF 7' deep		ASSIGNMENT				ADC SAC		ds			
MATERIALS										TYPE OF CONSTRUCTION				Perm		XP	
FOUNDATION		FLOOR		WALL		ROOF		CONDITION				Useable		/			
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		OCCUPANCY				AF		/			
HEATING										AIR FORCE INTEREST				Owned		/	
SOURCE		TYPE				FUEL		UNIT OF MEASURE (Other than area)				FA					
Hot Air		Furnace				#2 fuel oil		QUANTITY				1					
NO. OF USABLE FLOORS		FIRE PROTECTION								NOMENCLATURE				Fam Hsg Capehart			
1		NO.		TYPE						CATEGORY				711-111			
										REMARKS							
UTILITY CONNECTIONS				BLDG EQPT		NO.		TOTAL CAPACITY		-GH-1- Net SF 1614.1 S4-1 = 4S Atch Grge 517 SF - 2 VE							
WATER		1"		AIR CONDITIONING													
SEWER		6"		EVAPORATIVE COOLING													
ELECTRIC		110/220		MECHANICAL COOLING													
GAS				HOT WATER FACILITIES		1		80 Gal									
STEAM																	
CONDENSATE																	
VOUCHER NO.		DATE		DESCRIPTION				DATE COMPLETED		AREA UNIT		COST		TOTAL COST			
										AMOUNT		TOTAL					
91-63		15 Feb 63		Original Fac				6 Dec 62		1800 2326-2326		1800 2326-2326		18,230 25			
103-63		15 Apr 63		Trf collateral equip				6 Dec 62				417 00		17,813 25			
57-64		1-29-64		" " "				12-10-63				-134 00		17,679 25			
17-65		31 Jul 64		Pick Up Dishwasher as Installed Property				31 Jul 64		-		-		134 00			
60-6		11 Aug 65		Landscaping								1,359 28		19,172 53			
BALANCES FORWARDED										2326				19,172 53			

1742

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST		TOTAL COST	
				AMOUNT	TOTAL				
		BALANCES FORWARDED			2326			19,172	53
14-72	10 Aug 71	Constr Patio (W.O. #50288)	7-71			530	00	19,702	53
721356	1 12 72	RPIE Stove & Refer				233	50	19,936	03
724425	25 Feb 72	Patios (WO# 52129)	11-71			635	85	20,571	88
BALANCES FORWARDED									

Grand Forks AFB				JFSD 3348 FEB 15 1963		REF 710-004		9968		57111		BUILDING NO.		1744	
INSTALLATION NAME AND NO.				DATE		DRAWING NO.		RP ACCOUNT NO.		CONTROL NO.					
DIMENSIONS (Width x length)								FILL				CODE			
MAIN BUILDING		OFFSETS		WINGS		BASEMENTS		STATE							
60'8"x31'2"		23'6" X22'				760 SF 7' deep		North Dakota							
								ASSIGNMENT							
								ADC SAC							
MATERIALS								TYPE OF CONSTRUCTION							
FOUNDATION		FLOOR		WALL		ROOF		Perm							
Conc		Wood		Wood frame w/ partial brick		Wood deck w/ asphalt shingle		CONDITION							
								Useable							
HEATING								OCCUPANCY							
SOURCE		TYPE				FUEL		AF							
Hot Air		Furnace				#2 fuel oil		AIR FORCE INTEREST							
								Owned							
NO. OF USABLE FLOORS		FIRE PROTECTION						UNIT OF MEASURE (Other than area)							
1		NO.		TYPE				FA							
								QUANTITY							
								1							
UTILITY CONNECTIONS				BLDG EQPT		NO.		TOTAL CAPACITY		NOMENCLATURE					
WATER				AIR						Fam Hsg Capehart					
1"				CONDITIONING						CATEGORY					
SEWER				EVAPORATIVE						711-111					
6"				COOLING						REMARKS					
ELECTRIC				MECHANICAL						CH-1- S4-1 = 4S Net SF 1614.1 Atch Grge 517 SE - 2 VE					
110/220				COOLING											
GAS				HOT WATER											
STEAM				FACILITIES		1		80 Gal							
CONDENSATE															

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST		TOTAL COST	
				AMOUNT	TOTAL				
91-63	15 Feb 63	Original Fac	6 Dec 62	4809 2326	4809 2326	18,230	26	18,230	26
103-63	15 Apr 63	Trf collateral equip	6 Dec 62			417	00	17,813	26
57-64	1-29-64	" " "	12-10-63			(-134)	00	17,679	26
17-65	31 Jul 64	Pick Up Dishwasher as Installed Property	31 Jul 64	-	-	134	00	17,813	26
60-6	11 Aug 65	Landscaping				1,359	28	19,172	54
BALANCES FORWARDED					2326			19,172	54

1744

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST		TOTAL COST	
				AMOUNT	TOTAL				
		BALANCES FORWARDED			2326			19,172	54
14-72	10 Aug 71	Constr Patio (W.O. #50288)	7-71			530	00	19,702	54
704356	1 12 72	BRIE Stove & Refer				233	50	19,936	04
724425	25 Feb 72	Patios (WO#52129)	11-71			635	85	20,571	89
BALANCES FORWARDED									

APPENDIX G
LEAD-BASE PAINT AND ASBESTOS-CONTAINING MATERIAL
LAB ANALYSIS

is greater than .05 Nov 1994

Appendix E-Lead Based Paint Sample Analytical Results

AFB: Grand Forks

Bldg / Unit #	Address	Facility Type	Interior / Exterior	Child Under 7*	Results % by wt	Sample ID
1 PLAYGROUND	NEAR 6TH & J STREE	PLAYGROUND / OTHER OUTSI	EXTERIOR		0.0088	GF-PG1-1
10 PLAYGROUND	OFF J STREET	PLAYGROUND / OTHER OUTSI	EXTERIOR		0.0033	GF-PG10-1
1101 E	1101 ASH AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.0005	GF-1101-E-1
1104 B	1104 ASH AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.075	GF-1104-B-1
1105 D	1105 ASH AVE	FAMILY HOUSING UNITS	INTERIOR		0.0036	GF-1105-D-1
1106	1106 BIRCH AVE	FAMILY HOUSING UNITS	EXTERIOR		1	GF-1106-A-1
1108 C	1108 BIRCH AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.061	GF-1108-C-1
1109 E	1109 BIRCH AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.08599	GF-1109-E-1
1110 E	1110 CEDAR AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.043	GF-1110-E-1
1110	1110 CEDAR AVE	FAMILY HOUSING UNITS	EXTERIOR		6.4	GF-1110-E-2
1112 A	1112 MARCH DR	FAMILY HOUSING UNITS	INTERIOR		0.052	GF-1112-A-1
1113 B	1113 CEDAR AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.013	GF-1113-B-1
1117 F	1117 FIR AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.0012	GF-1117-F-1
1118 A	1118 FIR AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.016	GF-1118-A-1
1123 A	1123 GUMWOOD	FAMILY HOUSING UNITS	INTERIOR	Y	0.0088	GF-1123-A-1
1124-A	1124 GUMWOOD	FAMILY DAY CARE UNITS	INTERIOR	Y	52.1	GF-1124-A-1
1125 E	1125 GUMWOOD	FAMILY HOUSING UNITS	INTERIOR	Y	0.003	GF-1125-E-1
1126 F	1126 HEMLOCK AVE	FAMILY HOUSING UNITS	INTERIOR		0.0017	GF-1126-F-1
1128 B	1128 HEMLOCK AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.057	GF-1128-B-1
1129	1129 HEMLOCK AVE	FAMILY HOUSING UNITS	EXTERIOR		9.5	GF-1129-D-1
1129 A	1129 HEMLOCK AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.001	GF-1129-A-1
1132 C	1132 HEMLOCK AVE	FAMILY HOUSING UNITS	INTERIOR		0.0052	GF-1132-C-1
1135 E	1135 JUNIPER AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.076	GF-1135-E-1

* Childs an 7 years of age noted for interior inspections only

Appendix E-Lead Based Paint Sample Analytical Results

AFB: Grand Forks

Bldg / Unit #	Address	Facility Type	Interior / Exterior	Child Under 7*	Results % by wt	Sample ID
1137 B	1137 JUNIPER AVE	FAMILY HOUSING UNITS	INTERIOR	Y	2.8	GF-1137-B-1
1137 D	1137 JUNIPER AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.0027	GF-1137-D-2
1137 D	1137 JUNIPER AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.0058	GF-1137-D-1
1159	1159 REDWOOD AVE	FAMILY HOUSING UNITS	EXTERIOR		4.9	GF-1159-1-1
1160	1160 REDWOOD AVE	FAMILY HOUSING UNITS	EXTERIOR		5.4	GF-1160-E-1
1160 B	1160 REDWOOD AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.016	GF-1160-B-1
1162 E	1162 REDWOOD AVE	FAMILY HOUSING UNITS	INTERIOR		0.0046	GF-1162-E-1
1164	1164 REDWOOD AVE	FAMILY HOUSING UNITS	EXTERIOR		1.6	GF-1164-C-1
1175	1175 POPLAR AVE	FAMILY HOUSING UNITS	EXTERIOR		0.019	GF-1175-1
1181 B	1181 MAXWELL AVE	FAMILY HOUSING UNITS	INTERIOR		0.031	GF-1181-B-1
1182	1182 MAXWELL AVE	FAMILY HOUSING UNITS	EXTERIOR		3.5	GF-1182-1
1188	1188 MAXWELL AVE	FAMILY HOUSING UNITS	EXTERIOR		2.2	GF-1188-1
12 PLAYGROUND	BET. KORINA & MAX	PLAYGROUND / OTHER OUTSI	EXTERIOR		0.016	GF-PG12-1
120/168 DAYCARE CENTE	120 J ST	DAY CARE CENTER	EXTERIOR		0.0056	GF-120-2
120/168 DAYCARE CENTE	120 J ST	DAY CARE CENTER	EXTERIOR		0.44	GF-120-3
120/168 DAYCARE CENTE	120 J ST	DAY CARE CENTER	INTERIOR	Y	0.0027	GF-120-1
1206 B	1206 MARCH DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.0007	GF-1206-B-1
1208 A	1208 MARCH DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.0056	GF-1208-A-1
121 YOUTH ACT. CENTER	121 J ST	YOUTH CENTER / RECREATIO	INTERIOR		0.099	GF-121-1
121 YOUTH ACT. CENTER	121 J ST	YOUTH CENTER / RECREATIO	EXTERIOR		1.8	GF-121-2
1211 D	1211 CEDAR DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.0026	GF-1211-D-1
1213 D	1213 CEDAR DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.064	GF-1213-D-1
1220 A	1220 MARCH DR	FAMILY HOUSING UNITS	INTERIOR		0.0055	GF-1220-A-1

* Children less than 7 years of age noted for interior inspections only

Appendix E-Lead Based Paint Sample Analytical Results

AFB: Grand Forks

Bldg / Unit #	Address	Facility Type	Interior / Exterior	Child Under 7*	Results % by wt	Sample ID
1231 A	1231 HICKAM DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.0075	GF-1231-A-1
124 CHAPEL	124 J ST	CHURCH / CHAPEL	INTERIOR		0.0017	GF-124-1
1240 B	1240 HICKAM DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.0007	GF-1240-B-1
1246	1246 HICKAM DR	FAMILY HOUSING UNITS	EXTERIOR		5	GF-1246-B-1
1254 B	1254 NEVADA DR	FAMILY HOUSING UNITS	INTERIOR		0.014	GF-1254-B-1
1269 D	1269 RANDOLPH	FAMILY HOUSING UNITS	INTERIOR	Y	0.0056	GF-1269-D-1
1283 A	1283 REDWOOD DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.0009	GF-1283-A-1
1289	1289 REDWOOD DR	FAMILY HOUSING UNITS	INTERIOR		0.15	GF-1289-1
1291 A	1291 REDWOOD AVE	FAMILY HOUSING UNITS	INTERIOR		0.089	GF-1291-A-1
1301-D	1301 SPRUCE AVE	FAMILY DAY CARE UNITS	INTERIOR		0.073	GF-1301-D-1
1302	1302 SPRUCE AVE	FAMILY HOUSING UNITS	EXTERIOR		0.15	GF-1302-C-1
1306 A	1306 SPRUCE AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.11	GF-1306-A-1
1306 A	1306 SPRUCE AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.097	GF-1306-A-2
1310 D	1310 SPRUCE AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.0064	GF-1310-D-1
1312	1312 SPRUCE AVE	FAMILY HOUSING UNITS	EXTERIOR		0.013	GF-1312-D-1
1313 E	1313 SPRUCE AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.014	GF-1313-E-1
1314 E	1314 SPRUCE AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.041	GF-1314-E-1
1324 C	1324 SYCAMORE DR.	FAMILY HOUSING UNITS	INTERIOR		0.088	GF-1324-C-2
1330 B	1330 SYCAMORE DR	FAMILY HOUSING UNITS	INTERIOR		0.0031	GF-1330-B-1
1335 D	1335 TEAK AVE	FAMILY HOUSING UNITS	INTERIOR		0.47	GF-1335-D-1
1337 C	1337 TEAK AVE	FAMILY HOUSING UNITS	INTERIOR		0.0039	GF-1337-C-1
1344 D	1344 TEAK AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.17	GF-1344-D-2
1344 D	1344 TEAK AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.0011	GF-1344-D-1

* Children an 7 years of age noted for interior inspections only

Appendix E-Lead Based Paint Sample Analytical Results

AFB: Grand Forks

Bldg / Unit #	Address	Facility Type	Interior / Exterior	Child Under 7*	Results % by wt	Sample ID
1345-C	1345 TEAK AVE	FAMILY DAY CARE UNITS	INTERIOR		0.014	GF-1345-C-1
1347 C	1347 TEAK AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.0006	GF-1347-C-1
1350 D	1350 WILLOW AVE	FAMILY HOUSING UNITS	INTERIOR	Y	9.5	GF-1350-D-2
1350	1350 WILLOW AVE	FAMILY HOUSING UNITS	EXTERIOR		4.7	GF-1350-D-1
1351 D	1351 WILLOW AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.18	GF-1351-D-1
1353 D	1353 WILLOW AVE	FAMILY HOUSING UNITS	INTERIOR		0.048	GF-1353-D-1
1354	1354 WILLOW AVE	FAMILY HOUSING UNITS	EXTERIOR		1.7	GF-1354-B-1
1357 C	1357 WILLOW AVE	FAMILY HOUSING UNITS	INTERIOR		0.014	GF-1357-C-1
1367 B	1367 ASPEN AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.00059	GF-1367-B-1
1375 B	1375 ASPEN AVE	FAMILY HOUSING UNITS	INTERIOR	Y	0.0015	GF-1375-B-1
1383	1383 BEECH AVE	FAMILY HOUSING UNITS	EXTERIOR		0.065	GF-1383-D-1
14 PLAYGROUND	NEAR POPLAR & RED	PLAYGROUND / OTHER OUTSI	EXTERIOR		0.52	GF-PG14-1
1404 B	1404 SPRUCE DR	FAMILY HOUSING UNITS	INTERIOR	Y	3.1	GF-1404-B-1
1414	1414 SPRUCE DR	FAMILY HOUSING UNITS	EXTERIOR		0.05	GF-1414-A-1
1414	1414 SPRUCE DR	FAMILY HOUSING UNITS	EXTERIOR		0.051	GF-1414-A-2
1415	1415 SPRUCE DR	FAMILY HOUSING UNITS	EXTERIOR		0.075	GF-1415-B-1
1426 A	1426 BEECH DR	FAMILY HOUSING UNITS	INTERIOR		0.022	GF-1426-A-1
15 PLAYGROUND	SUNFLAKE CIR	PLAYGROUND / OTHER OUTSI	EXTERIOR		0.0055	GF-PG15-1
1502 A	1502 J ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.0012	GF-1502-A-1
1506 B	1506 J ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.039	GF-1506-B-1
1510	1510 KENTUCKY	FAMILY HOUSING UNITS	EXTERIOR		3.7	GF-1510-C-1
1512 A	1512 MARCH DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.0099	GF-1512-A-1
1701	1701 LOUISIANA ST	FAMILY HOUSING UNITS	EXTERIOR		8.3	GF-1701-E-1

* Children less than 7 years of age noted for interior inspections only

Appendix E-Lead Based Paint Sample Analytical Results

AFB: Grand Forks

Bldg / Unit #	Address	Facility Type	Interior / Exterior	Child Under 7*	Results % by wt	Sample ID
1709 B	1709 J ST	FAMILY HOUSING UNITS	INTERIOR		0.001	GF-1709-B-1
1721 C	1721 NEVADA DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.03	GF-1721-C-1
1741 A	1741 J ST	FAMILY HOUSING UNITS	INTERIOR		0.014	GF-1741-A-1
1752 A	1752 IOWA ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.56	GF-1752-A-1
1754	1754 IOWA ST	FAMILY HOUSING UNITS	EXTERIOR		0.0008	GF-1754-B-1
1759 B	1759 IOWA ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.39	GF-1759-B-1
1768	1768 IOWA ST	FAMILY HOUSING UNITS	EXTERIOR		6.5	GF-1768-A-2
1772 A	1772 HOLLY DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.1	GF-1772-A-2
1785 A	1785 INDIANA	FAMILY HOUSING UNITS	INTERIOR		0.0034	GF-1785-A-1
1789 B	1789 INDIANA	FAMILY HOUSING UNITS	INTERIOR	Y	0.53	GF-1789-B-3
1789 B	1789 INDIANA	FAMILY HOUSING UNITS	INTERIOR	Y	0.6	GF-1789-B-2
1804	1804 I ST	FAMILY HOUSING UNITS	EXTERIOR		0.028	GF-1804-D-1
1821 B	1821 OREGON ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.041	GF-1821-B-1
1824 A	1824 J ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.36	GF-1824-A-1
1827 B	1827 J ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.014	GF-1827-B-1
1828 C	1828 J ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.0005	GF-1828-C-1
1829 B	1829 J ST	FAMILY HOUSING UNITS	INTERIOR		0.26	GF-1829-B-1
1851 A	1851 BEECH DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.0014	GF-1851-A-1
1856 A	1856 BEECH DR	FAMILY HOUSING UNITS	INTERIOR	Y	3.7	GF-1856-A-1
1869 A	1869 I ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.0086	GF-1869-A-2
1869 A	1869 I ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.41	GF-1869-A-1
1881	1881 I ST	FAMILY HOUSING UNITS	EXTERIOR		0.96	GF-1881-B-1
1885 A	1885 I ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.0004	GF-1885-A-1

* Children an 7 years of age noted for interior inspections only

Appendix E-Lead Based Paint Sample Analytical Results

AFB: Grand Forks

Bldg / Unit #	Address	Facility Type	Interior / Exterior	Child Under 7*	Results % by wt	Sample ID
1905 A	1905 I ST	FAMILY HOUSING UNITS	INTERIOR		0.0051	GF-1905-A-1
2003	2003 J ST	FAMILY HOUSING UNITS	EXTERIOR		0.0037	GF-2003-B-1
2004 A	2004 J ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.0063	GF-2004-A-1-
2009	2009 J ST	FAMILY HOUSING UNITS	EXTERIOR		11.2	GF-2009-B-1
2016 B	2016 J ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.0008	GF-2016-B-1
202 BOWLING CENTER	202 STEEN AVE	YOUTH CENTER / RECREATIO	EXTERIOR		6	GF-202-2
202 BOWLING CENTER	202 STEEN AVE	YOUTH CENTER / RECREATIO	EXTERIOR		0.17	GF-202-1
203 RECREATION CENTER	203 HOLZAPPLE ST	YOUTH CENTER / RECREATIO	EXTERIOR		7	GF-203-1
2032	2032 J ST	FAMILY HOUSING UNITS	EXTERIOR		0.0078	GF-2032-A-1
2071	2071 LOUISIANA ST	FAMILY HOUSING UNITS	EXTERIOR		0.06	GF-2071-B-1
2071 A	2071 LOUISIANA ST	FAMILY HOUSING UNITS	INTERIOR	Y	0.0043	GF-2071-A-1
208 CHAPEL	208 SIXTH ST	CHURCH / CHAPEL	EXTERIOR		0.026	GF-208-2
208 CHAPEL	208 SIXTH ST	CHURCH / CHAPEL	INTERIOR		0.0057	GF-208-1
2087 B	2087 NEW JERSEY ST	FAMILY HOUSING UNITS	INTERIOR		0.0002	GF-2087-B-1
2087 B	2087 NEW JERSEY ST	FAMILY HOUSING UNITS	INTERIOR		0.0002	GF-2087-B-2
2087 B	2087 NEW JERSEY ST	FAMILY HOUSING UNITS	INTERIOR		0.012	GF-2087-B-3
2092 A	2092 NEW JERSEY S	FAMILY HOUSING UNITS	INTERIOR	Y	0.0031	GF-2092-A-1
2092	2092 NEW JERSEY S	FAMILY HOUSING UNITS	EXTERIOR		0.0041	GF-2092-A-2
2107	2107 IDAHO ST	FAMILY HOUSING UNITS	EXTERIOR		0.0064	GF-2107-A-1
2119	2119 IDAHO ST	FAMILY HOUSING UNITS	EXTERIOR		0.002	GF-2119-B-1
2128 B	2128 DOGWOOD DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.0008	GF-2128-B-1
2136 B	2136 DOGWOOD DR	FAMILY HOUSING UNITS	INTERIOR		0.0037	GF-2136-B-2
2136 B	2136 DOGWOOD DR	FAMILY HOUSING UNITS	INTERIOR		0.037	GF-2136-B-1

* Children less than 7 years of age noted for interior inspections only

Appendix E-Lead Based Paint Sample Analytical Results

AFB: Grand Forks

Bldg / Unit #	Address	Facility Type	Interior / Exterior	Child Under 7*	Results % by wt	Sample ID
2149	2149 DOGWOOD DR	FAMILY HOUSING UNITS	EXTERIOR		0.72	GF-2149-A-1
2153 A	2153 DOGWOOD DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.0035	GF-2153-A-1
2153	2153 DOGWOOD DR	FAMILY HOUSING UNITS	EXTERIOR		0.0048	GF-2153-B-1
2158	2158 DOGWOOD DR	FAMILY HOUSING UNITS	EXTERIOR		0.0048	GF-2158-A-1
2166 A	2166 DOGWOOD DR	FAMILY HOUSING UNITS	INTERIOR		0.023	GF-2166-A-1
2173 A	2173 DOGWOOD DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.0011	GF-2173-A-1
2253	2253 CYPRESS DR	FAMILY HOUSING UNITS	EXTERIOR		0.0059	GF-2253-B-2
2253 B	2253 CYPRESS DR	FAMILY HOUSING UNITS	INTERIOR		0.017	GF-2253-B-1
2256 B	2256 CYPRESS DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.0026	GF-2256-B-1
2257	2257 CYPRESS DR	FAMILY HOUSING UNITS	EXTERIOR		0.01	GF-2257-B-1
2262	2262 CYPRESS DR	FAMILY HOUSING UNITS	EXTERIOR		0.23	GF-2262-B-1
2281	2281 CYPRESS DR	FAMILY HOUSING UNITS	EXTERIOR		0.046	GF-2281-A-1
2281	2281 CYPRESS DR	FAMILY HOUSING UNITS	EXTERIOR		0.044	GF-2281-A-2
2290	2290 CYPRESS DR	FAMILY HOUSING UNITS	EXTERIOR		0.024	GF-2290-B-1
2302 B	2302 CYPRESS DR	FAMILY HOUSING UNITS	INTERIOR	Y	0.0095	GF-2302-B-1
2306	2306 CYPRESS DR	FAMILY HOUSING UNITS	EXTERIOR		0.0011	GF-2306-A-1
247	247 HOZAPPLE ST	TEMPORARY LIVING FACILITY	EXTERIOR		0.0081	GF-247-8-1
247	247 HOZAPPLE ST	TEMPORARY LIVING FACILITY	INTERIOR		0.0015	GF-247-6-1
308 GYMNASIUM	308 SIXTH AVE	YOUTH CENTER / RECREATIO	INTERIOR		0.001	GF-308-1
5 PLAYGROUND	BET. BEECH & J ST	PLAYGROUND / OTHER OUTSI	EXTERIOR		2	GF-PG5-1
6102	6102 SUNFLAKE CIR	FAMILY HOUSING UNITS	EXTERIOR		0.0054	GF-6102-1
6104	6104 SUNFLAKE CIR	FAMILY HOUSING UNITS	EXTERIOR		0.021	GF-6104-1
6108	6108 SUNFLAKE CIR	FAMILY HOUSING UNITS	EXTERIOR		3.3	GF-6108-G-1

* Childr. Jan 7 years of age noted for interior inspections only

Appendix E-Lead Based Paint Sample Analytical Results

AFB: Grand Forks

Bldg / Unit #	Address	Facility Type	Interior / Exterior	Child Under 7*	Results % by wt	Sample ID
6114	6114 SUNFLAKE CIR	FAMILY HOUSING UNITS	EXTERIOR		0.0063	GF-6113-A-1
6119	6119 SUNFLAKE CIR	FAMILY HOUSING UNITS	EXTERIOR		0.003	GF-6119-B-1
6133	6133 SUNFLAKE CIR	FAMILY HOUSING UNITS	EXTERIOR		0.0042	GF-6133-A-1
9 PLAYGROUND	BET. TEAK & I STREE	PLAYGROUND / OTHER OUTSI	EXTERIOR		0.0045	GF-PG9-1

* Children less than 7 years of age noted for interior inspections only

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
FAMILY HOUSING (1758B)
1758B IOWA ST.
Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>	
BA1BBSMT	1B	1,100	8		
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		
001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	12	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
Asbestos: Yes					
001	Wall - Sheetrock Board Type	5	147	Square Feet	Board Type
Asbestos: Yes					
00N1	Domestic Hot Water Tank FIBERGLASS, NON-SUSPECT ACM.		0	Square Feet	FIBERGLASS, NON-SUSPECT ACM.
Asbestos: Abated					
00N2	Hvac - Flexible Duct/flex Duct Joint RUBBER MATERIAL.		0	Linear Feet	RUBBER MATERIAL.
Asbestos: Abated					

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
 FAMILY HOUSING (1758B)
 1758B IOWA ST.
 Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
GA01GAR	01	362	0	NO SUSPECT ACM IN SPACE.
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>	

00N3	Wall - Sheetrock ULTRA-WALL, NON-SUSPECT MATERIAL.	0	Square Feet	ULTRA-WALL, NON-SUSPECT MATERIAL.
-------------	--	---	-------------	-----------------------------------

Asbestos: Abated

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
RF0RROOF	0R	2,000	12	PEAKED ROOF.
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>	

00A1	Roof - Shingled	5	2,200	Square Feet
-------------	-----------------	---	-------	-------------

Asbestos:

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
RS01RES	01	1,200	8	Area above ceiling is inaccessible.
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>	

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	1,100	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
------------	---	---	-------	-------------	---

Asbestos: Yes

002	Floor - Vinyl Composite Tile Misc. 12" X 12" tan with streaks. 12" X 12" white with tan streaks.	5	132	Square Feet	Misc. 12" X 12" tan with streaks. 12" X 12" white with tan streaks.
------------	--	---	-----	-------------	---

Asbestos: Yes

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
 FAMILY HOUSING (1758B)
 1758B IOWA ST.
 Grand Forks AFB, ND

001	Wall - Sheetrock Board Type	5	2,900	Square Feet	Board Type
-----	-----------------------------	---	-------	-------------	------------

Asbestos: Yes

Space ID	Floor	Area of floor	Height	Comments	
TO01TOIL	01	98	8	Area above ceiling is inaccessible.	
HM	Matl Description	Priority	Remaining Quantity		

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	4	92	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
-----	---	---	----	-------------	---

Asbestos: Yes

001	Wall - Sheetrock Board Type	4	334	Square Feet	Board Type
-----	-----------------------------	---	-----	-------------	------------

Asbestos: Yes

004	Floor - Vinyl Composite Sheet Misc. White with tan and brown spots. White with gold and pink	8	25	Square Feet	Misc. White with tan and brown spots. White with gold and pink specks.
-----	--	---	----	-------------	--

Asbestos: No

003	Floor - Vinyl Composite Sheet Tan with rectangles. Grey and brown rectangular pattern.	8	28	Square Feet	Tan with rectangles. Grey and brown rectangular pattern. UNDER CARPET.
-----	--	---	----	-------------	--

Asbestos: No

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
FAMILY HOUSING (1767A)
1767A IOWA ST.
Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>	
BA0BBASE	0B	704	7		
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		
001	Wall - Sheetrock Board Type	5	76	Square Feet	Board Type
Asbestos: Yes					
00N2	Domestic Hot Water Tank FIBERGLASS, NON-SUSPECT ACM.		0	Square Feet	FIBERGLASS, NON-SUSPECT ACM.
Asbestos: Abated					
00N3	Hvac - Flexible Duct/flex Duct Joint RUBBER MATERIAL.		0	Linear Feet	RUBBER MATERIAL.
Asbestos: Abated					
00N1	Insulation Batts FIBERGLASS, NON-SUSPECT ACM.		0	Square Feet	FIBERGLASS, NON-SUSPECT ACM.
Asbestos: Abated					
00N4	Pipe Insulation FIBERGLASS, NON-SUSPECT		0	Linear Feet	FIBERGLASS, NON-SUSPECT ACM.
Asbestos: Abated					

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
FAMILY HOUSING (1767A)
1767A IOWA ST.
Grand Forks AFB, ND

00N5	Wall - Sheetrock ULTRA-WALL, NON-SUSPECT MATERIAL.	0	Square Feet	ULTRA-WALL, NON-SUSPECT MATERIAL.
------	--	---	-------------	-----------------------------------

Asbestos: Abated

Space ID	Floor	Area of floor	Height	Comments
GA01GAR	01	299	0	NO SUSPECT ACM IN SPACE.

HM	Matl Description	Priority	Remaining Quantity
----	------------------	----------	--------------------

00N5	Wall - Sheetrock ULTRA-WALL, NON-SUSPECT MATERIAL.	0	Square Feet	ULTRA-WALL, NON-SUSPECT MATERIAL.
------	--	---	-------------	-----------------------------------

Asbestos: Abated

Space ID	Floor	Area of floor	Height	Comments
RF1RROOF1	1R	364	12	PEAKED ROOF.

HM	Matl Description	Priority	Remaining Quantity
----	------------------	----------	--------------------

00A1	Roof - Shingled	5	420	Square Feet
------	-----------------	---	-----	-------------

Asbestos:

Space ID	Floor	Area of floor	Height	Comments
RF2RROOF2	2R	1,000	20	PEAKED ROOF.

HM	Matl Description	Priority	Remaining Quantity
----	------------------	----------	--------------------

00A1	Roof - Shingled	5	1,200	Square Feet
------	-----------------	---	-------	-------------

Asbestos:

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
 FAMILY HOUSING (1767A)
 1767A IOWA ST.
 Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>	
RS01RES1	01	704	8		
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		
001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	704	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
Asbestos: Yes					
002	Floor - Vinyl Composite Tile 12" X 12" tan with streaks over floor-vinyl composite sheeting.	5	206	Square Feet	12" X 12" tan with streaks over floor-vinyl composite sheeting.
Asbestos: Yes					
001	Wall - Sheetrock Board Type	5	1,300	Square Feet	Board Type
Asbestos: Yes					
004	Floor - Vinyl Composite Sheet Misc. White with tan and brown spots, mostly under floor-vinyl	8	212	Square Feet	Misc. White with tan and brown spots, mostly under floor-vinyl composite tile.
Asbestos: No					

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
 FAMILY HOUSING (1767A)
 1767A IOWA ST.
 Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
RS02RES2	02	736	10	Area above ceiling is inaccessible.

<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>
-----------	-------------------------	-----------------	---------------------------

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	736	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
-----	---	---	-----	-------------	---

Asbestos: Yes

001	Wall - Sheetrock Board Type	5	1,600	Square Feet	Board Type
-----	-----------------------------	---	-------	-------------	------------

Asbestos: Yes

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
TO02TOIL	02	75	10	Area above ceiling is inaccessible.

<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>
-----------	-------------------------	-----------------	---------------------------

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	75	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
-----	---	---	----	-------------	---

Asbestos: Yes

001	Wall - Sheetrock Board Type	5	318	Square Feet	Board Type
-----	-----------------------------	---	-----	-------------	------------

Asbestos: Yes

SPACE DETAIL REPORT
300 AREA-HOLLY (300)
FAMILY HOUSING (1767A)
1767A IOWA ST.
Grand Forks AFB, ND

003	Floor - Vinyl Composite Sheet Misc. Tan with rectangular pattern.	8	60	Square Feet	Misc. Tan with rectangular pattern.
-----	---	---	----	-------------	-------------------------------------

Asbestos: No

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
 FAMILY HOUSING (1782A)
 1782A INDIANA ST.
 Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>	
AT02ATTIC	02	2,000	0	AREA IS PHYSICALLY AND VISUALLY INACCESSIBLE. ALL QUANTITIES AND CONDITIONS ARE ESTIMATED.	
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		
00N1	Attic Insulation FIBERGLASS, NON-SUSPECT ACM.	0	Square Feet	FIBERGLASS, NON-SUSPECT ACM.	
Asbestos: Abated					

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>	
BA0BBASE	0B	1,200	8		
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		
001	Wall - Sheetrock Board Type	5	100	Square Feet	Board Type
Asbestos: Yes					
005	Ceiling - Sheetrock Board Type WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	8	377	Square Feet	Board Type WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
Asbestos: No					

00N3	Domestic Hot Water Tank FIBERGLASS, NON-SUSPECT ACM. Under metal jacket.	0	Square Feet	FIBERGLASS, NON-SUSPECT ACM. Under metal jacket.	
Asbestos: Abated					

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
FAMILY HOUSING (1782A)
1782A INDIANA ST.
Grand Forks AFB, ND

00N4	Hvac - Flexible Duct/flex Duct Joint RUBBER MATERIAL.	0	Linear Feet	RUBBER MATERIAL.
------	---	---	-------------	------------------

Asbestos: Abated

00N2	Insulation Batts FIBERGLASS, NON-SUSPECT ACM.	0	Square Feet	FIBERGLASS, NON-SUSPECT ACM.
------	---	---	-------------	------------------------------

Asbestos: Abated

00N5	Pipe Insulation FOAM RUBBER, NON-SUSPECT ACM.	0	Linear Feet	FOAM RUBBER, NON-SUSPECT ACM.
------	---	---	-------------	-------------------------------

Asbestos: Abated

005	Wall - Sheetrock	8	142	Square Feet
-----	------------------	---	-----	-------------

Asbestos: No

00N6	Wall - Sheetrock ULTRA-WALL, NON-SUSPECT MATERIAL.	0	Square Feet	ULTRA-WALL, NON-SUSPECT MATERIAL.
------	--	---	-------------	-----------------------------------

Asbestos: Abated

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
 FAMILY HOUSING (1782A)
 1782A INDIANA ST.
 Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
GA01GAR	01	377	0	NO SUSPECT ACM IN SPACE.
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>	

00N6	Wall - Sheetrock ULTRA-WALL, NON-SUSPECT MATERIAL.	0	Square Feet	ULTRA-WALL, NON-SUSPECT MATERIAL.
------	--	---	-------------	-----------------------------------

Asbestos: Abated

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
RF0RROOF	0R	2,000	11	PEAKED ROOF.
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>	

00A1	Roof - Shingled	5	2,200	Square Feet
------	-----------------	---	-------	-------------

Asbestos:

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
RS01RES	01	1,200	8	
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>	

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	1,200	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
-----	---	---	-------	-------------	---

Asbestos: Yes

002	Floor - Vinyl Composite Tile 12" X 12" tan with streaks.	5	147	Square Feet	12" X 12" tan with streaks.
-----	--	---	-----	-------------	-----------------------------

Asbestos: Yes

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
FAMILY HOUSING (1782A)
1782A INDIANA ST.
Grand Forks AFB, ND

001	Wall - Sheetrock Board Type	5	2,500	Square Feet	Board Type
-----	-----------------------------	---	-------	-------------	------------

Asbestos: Yes

Space ID	Floor	Area of floor	Height	Comments
TO01TOIL	01	68	8	
HM	Matl Description	Priority	Remaining Quantity	

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	68	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
-----	---	---	----	-------------	---

Asbestos: Yes

001	Wall - Sheetrock Board Type	5	334	Square Feet	Board Type
-----	-----------------------------	---	-----	-------------	------------

Asbestos: Yes

003	Floor - Vinyl Composite Sheet Tan with rectangles.	8	30	Square Feet	Tan with rectangles.
-----	--	---	----	-------------	----------------------

Asbestos: No

004	Floor - Vinyl Composite Sheet White with tan and brown spots.	8	25	Square Feet	White with tan and brown spots.
-----	---	---	----	-------------	---------------------------------

Asbestos: No

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
 FAMILY HOUSING (1877B)
 1877B I ST.
 Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
AT03ATTIC	03	720	0	AREA IS PHYSICALLY AND VISUALLY INACCESSIBLE. ALL QUANTITIES AND CONDITIONS ARE ESTIMATED.

<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>
-----------	-------------------------	-----------------	---------------------------

00N1	Attic Insulation FIBERGLASS, NON-SUSPECT ACM.	0	Square Feet	FIBERGLASS, NON-SUSPECT ACM.
------	---	---	-------------	------------------------------

Asbestos: Abated

00N5	Wall - Sheetrock ULTRA-WALL, NON-SUSPECT MATERIAL.	0	Square Feet	ULTRA-WALL, NON-SUSPECT MATERIAL.
------	--	---	-------------	-----------------------------------

Asbestos: Abated

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
BA0BBASE	0B	576	7	

<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>
-----------	-------------------------	-----------------	---------------------------

006	Miscellaneous Materials Tar-like sealant at bottom of block walls.	5	96	Square Feet	Tar-like sealant at bottom of block walls.
-----	--	---	----	-------------	--

Asbestos: Yes

001	Wall - Sheetrock Board Type	5	78	Square Feet	Board Type
-----	-----------------------------	---	----	-------------	------------

Asbestos: Yes

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
FAMILY HOUSING (1877B)
1877B I ST.
Grand Forks AFB, ND

00N3	Domestic Hot Water Tank FIBERGLASS, NON-SUSPECT ACM. Under metal jacket.	0	Square Feet	FIBERGLASS, NON-SUSPECT ACM. Under metal jacket.
------	---	---	-------------	--

Asbestos: Abated

00N2	Insulation Batts FIBERGLASS, NON-SUSPECT ACM.	0	Square Feet	FIBERGLASS, NON-SUSPECT ACM.
------	--	---	-------------	------------------------------

Asbestos: Abated

00N4	Pipe Insulation FOAM RUBBER, NON-SUSPECT ACM.	0	Linear Feet	FOAM RUBBER, NON-SUSPECT ACM.
------	--	---	-------------	-------------------------------

Asbestos: Abated

00N5	Wall - Sheetrock ULTRA-WALL, NON-SUSPECT MATERIAL.	0	Square Feet	ULTRA-WALL, NON-SUSPECT MATERIAL.
------	---	---	-------------	-----------------------------------

Asbestos: Abated

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
GA01GAR	01	288	0	NO SUSPECT ACM IN SPACE.

<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>
-----------	-------------------------	-----------------	---------------------------

00N5	Wall - Sheetrock ULTRA-WALL, NON-SUSPECT MATERIAL.	0	ULTRA-WALL, NON-SUSPECT MATERIAL.
------	---	---	-----------------------------------

Asbestos: Abated

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
 FAMILY HOUSING (1877B)
 1877B I ST.
 Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>		<u>Comments</u>
RF1RROOF1	1R	480	11	PEAKED ROOF.	
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		

00A1	Roof - Shingled	5	530	Square Feet
------	-----------------	---	-----	-------------

Asbestos:

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>		<u>Comments</u>
RF2RROOF2	2R	720	18	PEAKED ROOF.	
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		

00A1	Roof - Shingled	5	825	Square Feet
------	-----------------	---	-----	-------------

Asbestos:

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>		<u>Comments</u>
RS01RES1	01	548	8		
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	548	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
-----	---	---	-----	-------------	---

Asbestos: Yes

002	Floor - Vinyl Composite Tile 12" X 12" tan with streaks. 12" X 12" off-white with streaks, over	5	138	Square Feet	12" X 12" tan with streaks. 12" X 12" off-white with streaks, over floor-vinyl composite sheeting.
-----	---	---	-----	-------------	--

Asbestos: Yes

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
FAMILY HOUSING (1877B)
1877B I ST.
Grand Forks AFB, ND

001	Wall - Sheetrock Board Type	5	1,200	Square Feet	Board Type
-----	-----------------------------	---	-------	-------------	------------

Asbestos: Yes

005	Floor - Vinyl Composite Sheet Misc. Off-white with blue and green spots, partly under	8	142	Square Feet	Misc. Off-white with blue and green spots, partly under floor-vinyl composite tile.
-----	---	---	-----	-------------	---

Asbestos: No

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
RS02RES2	02	514	8	

<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>
-----------	-------------------------	-----------------	---------------------------

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	514	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
-----	---	---	-----	-------------	---

Asbestos: Yes

001	Wall - Sheetrock Board Type	5	1,600	Square Feet	Board Type
-----	-----------------------------	---	-------	-------------	------------

Asbestos: Yes

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
 FAMILY HOUSING (1877B)
 1877B I ST.
 Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>	
TO01TOIL1	01	33	8		
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		
001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	33	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
Asbestos: Yes					
001	Wall - Sheetrock Board Type	5	123	Square Feet	Board Type
Asbestos: Yes					
003	Floor - Vinyl Composite Sheet Misc. White with brown and pink spots.	8	33	Square Feet	Misc. White with brown and pink spots.
Asbestos: No					
<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>	
TO02TOIL2	02	38	8		
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		
001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	38	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
Asbestos:					

SPACE DETAIL REPORT
300 AREA-HOLLY (300)
FAMILY HOUSING (1877B)
1877B I ST.
Grand Forks AFB, ND

001	Wall - Sheetrock Board Type	5	179	Square Feet	Board Type
Asbestos: Yes					
004	Floor - Vinyl Composite Sheet Misc. Tan rectangle pattern. Tan rectangular pattern.	8	25	Square Feet	Misc. Tan rectangle pattern. Tan rectangular pattern.
Asbestos: No					

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
FAMILY HOUSING (1920A)
1920A HAWAII ST.
Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
AT03ATTIC	03	720	0	PARTIALLY ABOVE CEILING.

<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>
-----------	-------------------------	-----------------	---------------------------

00N1	Attic Insulation FIBERGLASS, NON-SUSPECT ACM.	0	Square Feet	FIBERGLASS, NON-SUSPECT ACM.
------	---	---	-------------	------------------------------

Asbestos: Abated

00N5	Wall - Sheetrock ULTRA-WALL, NON-SUSPECT MATERIAL.	0	Square Feet	ULTRA-WALL, NON-SUSPECT MATERIAL.
------	--	---	-------------	-----------------------------------

Asbestos: Abated

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
BA0BBASE	0B	576	7	

<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>
-----------	-------------------------	-----------------	---------------------------

001	Wall - Sheetrock Board Type	5	78	Square Feet	Board Type
-----	-----------------------------	---	----	-------------	------------

Asbestos: Yes

00N3	Hvac - Flexible Duct/flex Duct Joint RUBBER MATERIAL.	0	Linear Feet	RUBBER MATERIAL.
------	---	---	-------------	------------------

Asbestos:

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
FAMILY HOUSING (1920A)
1920A HAWAII ST.
Grand Forks AFB, ND

00N2	Insulation Batts FIBERGLASS, NON-SUSPECT ACM.	0	Square Feet	FIBERGLASS, NON-SUSPECT ACM.
------	---	---	-------------	------------------------------

Asbestos: Abated

00N4	Pipe Insulation FOAM RUBBER, NON-SUSPECT ACM.	0	Linear Feet	FOAM RUBBER, NON-SUSPECT ACM.
------	---	---	-------------	-------------------------------

Asbestos: Abated

00N5	Wall - Sheetrock ULTRA-WALL, NON-SUSPECT MATERIAL.	0	Square Feet	ULTRA-WALL, NON-SUSPECT MATERIAL.
------	--	---	-------------	-----------------------------------

Asbestos: Abated

Space ID	Floor	Area of floor	Height	Comments
GA01GAR	01	288	0	NO SUSPECT ACM IN SPACE.

HM	Matl Description	Priority	Remaining Quantity
----	------------------	----------	--------------------

00N5	Wall - Sheetrock ULTRA-WALL, NON-SUSPECT MATERIAL.	0	Square Feet	ULTRA-WALL, NON-SUSPECT MATERIAL.
------	--	---	-------------	-----------------------------------

Asbestos: Abated

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
 FAMILY HOUSING (1920A)
 1920A HAWAII ST.
 Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>		<u>Comments</u>
RF1RROOF1	1R	480	11	PEAKED ROOF.	
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		

00A1	Roof - Shingled	5	530	Square Feet	
-------------	------------------------	---	-----	-------------	--

Asbestos:

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>		<u>Comments</u>
RF2RROOF2	2R	720	18	PEAKED ROOF.	
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		

00A1	Roof - Shingled	5	825	Square Feet	
-------------	------------------------	---	-----	-------------	--

Asbestos:

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>		<u>Comments</u>
RS01RES1	01	548	8		
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	548	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
------------	--	---	-----	-------------	---

Asbestos: Yes

002	Floor - Vinyl Composite Tile 12" X 12" tan with streaks.	5	142	Square Feet	12" X 12" tan with streaks.
------------	---	---	-----	-------------	-----------------------------

Asbestos: Yes

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
FAMILY HOUSING (1920A)
1920A HAWAII ST.
Grand Forks AFB, ND

001	Wall - Sheetrock Board Type	5	1,200	Square Feet	Board Type
-----	-----------------------------	---	-------	-------------	------------

Asbestos: Yes

Space ID	Floor	Area of floor	Height	Comments
RS02RES2	02	514	8	

HM	Matl Description	Priority	Remaining Quantity
----	------------------	----------	--------------------

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	514	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
-----	---	---	-----	-------------	---

Asbestos: Yes

001	Wall - Sheetrock Board Type	5	1,600	Square Feet	Board Type
-----	-----------------------------	---	-------	-------------	------------

Asbestos: Yes

Space ID	Floor	Area of floor	Height	Comments
TO01TOIL1	01	33	8	

HM	Matl Description	Priority	Remaining Quantity
----	------------------	----------	--------------------

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	33	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
-----	---	---	----	-------------	---

Asbestos: Yes

SPACE DETAIL REPORT

300 AREA-HOLLY (300)
FAMILY HOUSING (1920A)
1920A HAWAII ST.
Grand Forks AFB, ND

001	Wall - Sheetrock Board Type	5	123	Square Feet	Board Type
-----	-----------------------------	---	-----	-------------	------------

Asbestos: Yes

003	Floor - Vinyl Composite Sheet Misc. White with brown and pink spots.	8	33	Square Feet	Misc. White with brown and pink spots.
-----	--	---	----	-------------	--

Asbestos: No

Space ID	Floor	Area of floor	Height	Comments
TO02TOIL2	02	38	8	

HM	Matl Description	Priority	Remaining Quantity
----	------------------	----------	--------------------

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	38	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
-----	---	---	----	-------------	---

Asbestos: Yes

001	Wall - Sheetrock Board Type	5	179	Square Feet	Board Type
-----	-----------------------------	---	-----	-------------	------------

Asbestos: Yes

004	Floor - Vinyl Composite Sheet Misc. Tan rectangle pattern.	8	25	Square Feet	Misc. Tan rectangle pattern.
-----	--	---	----	-------------	------------------------------

Asbestos: No

SPACE DETAIL REPORT

304 AREA-REDWOOD (304)

FAMILY HOUSING (1287)

1287 REDWOOD AVE.

Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>	
BA0BBASE	0B	781	8		
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		
004	Floor - Vinyl Composite Tile 9" X 9" brown.	6	382	Square Feet	9" X 9" brown.
Asbestos: Yes					
001	Wall - Sheetrock Board Type with Trowelled On	6	100	Square Feet	Board Type with Trowelled On
Asbestos: Yes					
00N1	Ceiling - Glued On Tiles Wood fiber.		0	Square Feet	Wood fiber.
Asbestos: Abated					
00N2	Domestic Hot Water Tank FIBERGLASS, NON-SUSPECT ACM.		0	Square Feet	FIBERGLASS, NON-SUSPECT ACM.
Asbestos: Abated					
00N3	Hvac - Flexible Duct/flex Duct Joint RUBBER MATERIAL.		0	Linear Feet	RUBBER MATERIAL.
Asbestos: Abated					

SPACE DETAIL REPORT

304 AREA-REDWOOD (304)

FAMILY HOUSING (1287)

1287 REDWOOD AVE.

Grand Forks AFB, ND

00N4	Pipe Insulation FOAM RUBBER, NON-SUSPECT ACM.	0	Linear Feet	FOAM RUBBER, NON-SUSPECT ACM.
------	---	---	-------------	-------------------------------

Asbestos: Abated

Space ID	Floor	Area of floor	Height	Comments
EX0XEXT	0X	1,300	14	

HM	Matl Description	Priority	Remaining Quantity
----	------------------	----------	--------------------

00A1	Piping - Gas Piping Insulation Paper around gas line was too small in quantity to sample. 2"	4	1	Linear Feet	Paper around gas line was too small in quantity to sample. 2"
------	--	---	---	-------------	---

Asbestos:

Space ID	Floor	Area of floor	Height	Comments
GA01GAR	01	504	0	NO SUSPECT ACM IN SPACE.

HM	Matl Description	Priority	Remaining Quantity
----	------------------	----------	--------------------

00N5	Wall - Sheetrock ULTRA-WALL, NON-SUSPECT MATERIAL.	0	Square Feet	ULTRA-WALL, NON-SUSPECT MATERIAL.
------	--	---	-------------	-----------------------------------

Asbestos: Abated

Space ID	Floor	Area of floor	Height	Comments
RF0RROOF	0R	2,900	14	PEAKED ROOF.

HM	Matl Description	Priority	Remaining Quantity
----	------------------	----------	--------------------

00A2	Roof - Shingled	5	3,100	Square Feet
------	-----------------	---	-------	-------------

Asbestos:

SPACE DETAIL REPORT

304 AREA-REDWOOD (304)

FAMILY HOUSING (1287)

1287 REDWOOD AVE.

Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
RS01RES	01	1,600	8	
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>	

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	4	1,600	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
-----	---	---	-------	-------------	---

Asbestos: Yes

002	Floor - Vinyl Composite Sheet Misc. Tan with 1" squares.	5	140	Square Feet	Misc. Tan with 1" squares.
-----	--	---	-----	-------------	----------------------------

Asbestos: Yes

001	Wall - Sheetrock Board Type with Trowelled On	4	3,300	Square Feet	Board Type with Trowelled On
-----	---	---	-------	-------------	------------------------------

Asbestos: Yes

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
TO01TOIL1	01	48	8	
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>	

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	48	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
-----	---	---	----	-------------	---

Asbestos:

SPACE DETAIL REPORT

304 AREA-REDWOOD (304)

FAMILY HOUSING (1287)

1287 REDWOOD AVE.

Grand Forks AFB, ND

001	Wall - Sheetrock Board Type with Trowelled On	5	248	Square Feet	Board Type with Trowelled On
-----	---	---	-----	-------------	------------------------------

Asbestos: Yes

003	Floor - Vinyl Composite Sheet Grey and brown octagonal pattern.	8	36	Square Feet	Grey and brown octagonal pattern.
-----	---	---	----	-------------	-----------------------------------

Asbestos: No

Space ID	Floor	Area of floor	Height	Comments
TO01TOIL2	01	48	8	

HM	Matl Description	Priority	Remaining Quantity
----	------------------	----------	--------------------

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	48	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
-----	---	---	----	-------------	---

Asbestos: Yes

001	Wall - Sheetrock Board Type with Trowelled On	5	240	Square Feet	Board Type with Trowelled On
-----	---	---	-----	-------------	------------------------------

Asbestos: Yes

003	Floor - Vinyl Composite Sheet Grey and brown octagonal pattern.	8	36	Square Feet	Grey and brown octagonal pattern.
-----	---	---	----	-------------	-----------------------------------

Asbestos: No

SPACE DETAIL REPORT

304 AREA-REDWOOD (304)

FAMILY HOUSING (1293A)

1293A REDWOOD DR.

Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>	
BA0BBSMT	0B	729	7		
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>		
001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	7	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
Asbestos: Yes					
001	Wall - Sheetrock Board Type	5	180	Square Feet	Board Type
Asbestos: Yes					
00N1	Domestic Hot Water Tank FIBERGLASS, NON-SUSPECT ACM.		0	Square Feet	FIBERGLASS, NON-SUSPECT ACM.
Asbestos: Abated					
00N2	Hvac - Flexible Duct/flex Duct Joint RUBBER MATERIAL.		0	Linear Feet	RUBBER MATERIAL.
Asbestos: Abated					

SPACE DETAIL REPORT

304 AREA-REDWOOD (304)

FAMILY HOUSING (1293A)

1293A REDWOOD DR.

Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
GA01GAR	01	276	0	NO SUSPECT ACM IN SPACE.
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>	

00N3	Wall - Sheetrock ULTRA-WALL, NON-SUSPECT MATERIAL.	0	Square Feet	ULTRA-WALL, NON-SUSPECT MATERIAL.
-------------	--	---	-------------	-----------------------------------

Asbestos: Abated

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
RF1RROOF1	1R	276	12	
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>	

00A1	Roof - Asphalt And Gravel	5	276	Square Feet
-------------	---------------------------	---	-----	-------------

Asbestos:

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
RF2RROOF2	2R	1,800	15	PEAKED ROOF.
<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>	

00A2	Roof - Shingled	5	2,000	Square Feet
-------------	-----------------	---	-------	-------------

Asbestos:

SPACE DETAIL REPORT

304 AREA-REDWOOD (304)

FAMILY HOUSING (1293A)

1293A REDWOOD DR.

Grand Forks AFB, ND

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
RS01RES	01	1,300	8	Area above ceiling is inaccessible.

<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>
-----------	-------------------------	-----------------	---------------------------

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	1,300	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
------------	--	---	-------	-------------	---

Asbestos: Yes

002	Floor - Vinyl Composite Tile Misc. 12" X 12" white with tan streaks.	5	166	Square Feet	Misc. 12" X 12" white with tan streaks.
------------	---	---	-----	-------------	---

Asbestos: Yes

001	Wall - Sheetrock Board Type	5	3,000	Square Feet	Board Type
------------	------------------------------------	---	-------	-------------	------------

Asbestos: Yes

<u>Space ID</u>	<u>Floor</u>	<u>Area of floor</u>	<u>Height</u>	<u>Comments</u>
TO01TOIL	01	79	8	Area above ceiling is inaccessible.

<u>HM</u>	<u>Matl Description</u>	<u>Priority</u>	<u>Remaining Quantity</u>
-----------	-------------------------	-----------------	---------------------------

001	Ceiling - Sheetrock WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.	5	79	Square Feet	WALL AND CEILING MATERIAL CONSIDERED IDENTICAL.
------------	--	---	----	-------------	---

Asbestos:

SPACE DETAIL REPORT
304 AREA-REDWOOD (304)
FAMILY HOUSING (1293A)
1293A REDWOOD DR.
Grand Forks AFB, ND

001	Wall - Sheetrock Board Type	5	394	Square Feet	Board Type
Asbestos: Yes					
003	Floor - Vinyl Composite Sheet Grey and brown rectangular.	8	40	Square Feet	Grey and brown rectangular.
Asbestos: No					



DEPARTMENT OF THE AIR FORCE
319TH CIVIL ENGINEER SQUADRON
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA

DEC 22 2004

MEMORANDUM FOR Dr. Terry Dwelle, State Health Officer
North Dakota Department of Health
600 East Boulevard Avenue, Dept 301
Bismarck, ND 58505-0200

FROM: 319 CES/CEV
525 Tuskegee Airmen Blvd
Grand Forks AFB, ND 58205-6434

SUBJECT: Environmental Assessment for Grand Forks Air Force Base, North Dakota.

1. The U.S. Air Force is preparing an environmental assessment (EA) on the transfer of Military Family Housing units to Operation Walking Shield, a non-profit initiative created to alleviate poverty on Native American reservations. Attached is an electronic copy of the EA. Please review the document and identify any additional resources within your agency's responsibility that may be impacted by the action. We respectfully request that your comments be sent, electronically if necessary, to reach our office by January 6, 2005, to:

Mrs. Diane Strom, 319 CES/CEVA
525 Tuskegee Airmen Blvd
Grand Forks AFB, ND 58205-6434

2. Your assistance in providing information is greatly appreciated. If you have any questions, please call Mrs. Diane Strom at 701-747-6394, or email diane.strom@grandforks.af.mil.


MARY C. SILTNER
Deputy Base Civil Engineer

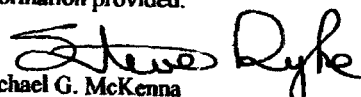
Attachment:
EA

cc:
North Dakota Game and Fish
State Historical Society of North Dakota
US Fish and Wildlife



Date: _____
North Dakota Game & Fish Dept.
100 N. Bismarck Expressway
Bismarck, ND 58501-5095

We have reviewed the project and foresee no identifiable conflict with wildlife or wildlife habitat based on the information provided.


(for) Michael G. McKenna
Chief, Conservation & Communication Division
1/4/05



DEPARTMENT OF THE AIR FORCE
319TH CIVIL ENGINEER SQUADRON
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA

DEC 22 2004

MEMORANDUM FOR Dr. Terry Dwelle, State Health Officer
North Dakota Department of Health
600 East Boulevard Avenue, Dept 301
Bismarck, ND 58505-0200

FROM: 319 CES/CEV
525 Tuskegee Airmen Blvd
Grand Forks AFB, ND 58205-6434

SUBJECT: Environmental Assessment for Grand Forks Air Force Base, North Dakota.

1. The U.S. Air Force is preparing an environmental assessment (EA) on the transfer of Military Family Housing units to Operation Walking Shield, a non-profit initiative created to alleviate poverty on Native American reservations. Attached is an electronic copy of the EA. Please review the document and identify any additional resources within your agency's responsibility that may be impacted by the action. We respectfully request that your comments be sent, electronically if necessary, to reach our office by January 6, 2005, to:

Mrs. Diane Strom, 319 CES/CEVA
525 Tuskegee Airmen Blvd
Grand Forks AFB, ND 58205-6434

2. Your assistance in providing information is greatly appreciated. If you have any questions, please call Mrs. Diane Strom at 701-747-6394, or email diane.strom@grandforks.af.mil.


MARY C. GILTNER
Deputy Base Civil Engineer

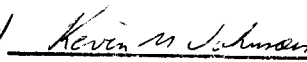
Attachment:
EA

cc:
North Dakota Game and Fish
State Historical Society of North Dakota
US Fish and Wildlife

U.S. FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
ND FIELD OFFICE

Project as described will have no significant impact on fish and wildlife resources. No endangered or threatened species are known to occupy the project area. IF PROJECT DESIGN CHANGES ARE MADE, PLEASE SUBMIT PLANS FOR REVIEW.

12-27-04
Date


(For) Jeffrey K. Towner
Field Supervisor



**STATE
HISTORICAL
SOCIETY
OF NORTH DAKOTA**

John Hoeven
Governor of North Dakota

December 28, 2004

**North Dakota
State Historical Board**

Diane K. Larson
Bismarck - President

Marvin L. Kaiser
Williston - Vice President

Albert I. Berger
Grand Forks - Secretary

Chester E. Nelson, Jr.
Bismarck

Gereld Gerntholz
Valley City

A. Ruric Todd III
Jamestown

Sara Otte Coleman
Director
Tourism Division

Kathi Gilmore
State Treasurer

Alvin A. Jaeger
Secretary of State

Douglass Prchal
Director
Parks and Recreation
Department

David A. Sprynczynatyk
Director
Department of Transportation

John E. Von Rueden
Bismarck

Merlan E. Paaverud, Jr.
Director

Diane Strom, 319 CES/CEVA
525 Tuskegee Airmen Blvd
Grand Forks AFB, ND 58205-6434

ND SHPO Ref.: 97-0527ax, Draft EA, Housing Transfer, Grand Forks AFB, ND.

Dear Ms. Strom:

We have reviewed: *Environmental Assessment Housing Transfer at Grand Forks AFB, North Dakota* (Draft Version, Dec 2004), and have the following comment:

1) Sections 3.8, 4.8, and 4.15 - Actual or potential historic properties could be impacted by placement of the units at new locations. We recommend that when locations are selected for each unit, consultation be initiated with the appropriate SHPO and any interested federal agency(ies) (such as the Bureau of Indian Affairs) for review of the proposed APE.

Thank you for the opportunity to review this project. Please include the ND SHPO Reference number listed above in any further correspondence for this specific project. If you have any questions please contact Duane Klinner at (701) 328-3576.

Sincerely,

Duane Klinner for

Merlan E. Paaverud, Jr.
State Historic Preservation Officer
(North Dakota)

Accredited by the
American Association
of Museums



NORTH DAKOTA
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION
1200 Missouri Avenue, Bismarck, ND 58504-5264
P.O. Box 5520, Bismarck, ND 58506-5520
701.328.5200 (fax)
www.ndhealth.gov



December 28, 2004

Ms. Diane Strom
319 CES/CEVA
525 Tuskegee Airmen Blvd.
Grand Forks AFB, ND 58205-6434

Re: Military Family Housing Unit Transfer to Operation Walking Shield
Grand Forks Air Force Base, Grand Forks County

Dear Ms. Strom:

This department has reviewed the information concerning the above-referenced project submitted under date of December 22, 2004, with respect to possible environmental impacts.

This department believes that environmental impacts from the proposed construction will be minor and can be controlled by proper construction methods. With respect to construction, we have the following comments:

1. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance, and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.
2. Projects disturbing one or more acres are required to have a permit to discharge storm water runoff until the site is stabilized by the reestablishment of vegetation or other permanent cover. Further information on the storm water permit may be obtained from the Department's website or by calling the Division of Water Quality (701-328-5210). Also, cities may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local storm water management considerations are addressed.
3. All necessary measures must be taken to minimize the disturbance of any asbestos-containing material and to prevent any asbestos fiber release episodes. Removal of any friable asbestos-containing material must be accomplished in accordance with section 33-15-13-02 of the North Dakota air pollution control rules. A Notification of Demolition and Renovation form (SFN 17987) must be submitted to the Division of Air Quality 10 days prior to moving the houses.

Environmental Health
Section Chief's Office
701.328.5150

Air
Quality
701.328.5188

Municipal
Facilities
701.328.5211

Waste
Management
701.328.5166

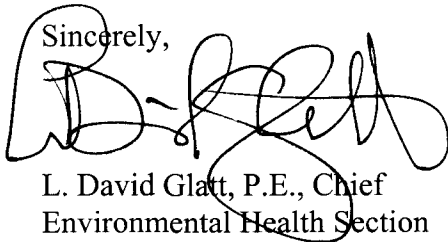
Water
Quality
701.328.5210

4. Lead-based paint has been identified on interior and exterior building components. Any painted surface in poor condition as indicated by cracking, peeling or chalking should be abated by a certified lead abatement contractor. A Notification of Lead-Based Paint Abatement form (SFN 53479) should be submitted to the Division of Air Quality 10 days prior to the abatement beginning.
5. All solid waste materials must be managed and transported in accordance with the state's solid and hazardous waste rules. Appropriate efforts to reduce, reuse and/or recycle waste materials are strongly encouraged. As appropriate, segregation of inert waste from non-inert waste can generally reduce the cost of waste management. Further information on waste management and recycling is available from the Department's Division of Waste Management at (701) 328-5166.

The department owns no land in or adjacent to the proposed improvements, nor does it have any projects scheduled in the area. In addition, we believe the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.

If you have any questions regarding our comments, please feel free to contact this office.

Sincerely,

A handwritten signature in black ink, appearing to read "L. David Glatt", written over the word "Sincerely,".

L. David Glatt, P.E., Chief
Environmental Health Section

LDG:cc



Construction and Environmental Disturbance Requirements

These represent the minimum requirements of the North Dakota Department of Health. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect the waters of the State of North Dakota. All projects will be designed and implemented to restrict the losses or disturbances of soil, vegetative cover, and pollutants (chemical or biological) from a site.

Soils

Prevent the erosion of exposed soil surfaces and trapping sediments being transported. Examples include, but are not restricted to, sediment dams or berms, diversion dikes, hay bales as erosion checks, riprap, mesh or burlap blankets to hold soil during construction, and immediately establishing vegetative cover on disturbed areas after construction is completed. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, or land resources will be protected against compaction, vegetation loss, and unnecessary damage.

Surface Waters

All construction which directly or indirectly impacts aquatic systems will be managed to minimize impacts. All attempts will be made to prevent the contamination of water at construction sites from fuel spillage, lubricants, and chemicals, by following safe storage and handling procedures. Stream bank and stream bed disturbances will be controlled to minimize and/or prevent silt movement, nutrient upsurges, plant dislocation, and any physical, chemical, or biological disruption. The use of pesticides or herbicides in or near these systems is forbidden without approval from this Department.

Fill Material

Any fill material placed below the high water mark must be free of top soils, decomposable materials, and persistent synthetic organic compounds (in toxic concentrations). This includes, but is not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill materials. All temporary fills must be removed. Debris and solid wastes will be removed from the site and the impacted areas restored as nearly as possible to the original condition.